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ABSTRACT

This is the report of a longitudinal study that followed a sample of women from their senior year in college in 1967 to their widely dispersed lives in 1970. The study focuses on their occupational and educational aspirations and experiences, and the determinants of these. Of the initial sample of 200 women, 152 were relocated and equally distributed among the three groups: Role-Innovators, Traditionals and Moderates. Statistics show that many of the women have married and are taking advanced courses or are studying full-time, and about one-fifth are full-time mothers and housewives. There has been a general shift toward more traditional activities, but aspirations in 1970 indicate a second and larger shift in the future toward more innovative activities. There has been a significant increase in conflict felt between marriage and a career, an increase in commitment to working, and a significant decrease in the number of children desired. The best predictor in Innovation in 1970 is the occupational aspiration in 1967. Several of the new measures developed in the original study remain strong predictors of 1970 Innovativeness, including "Demand Character of the Future Husband" and "Implied Demand Character of the Wife's Future." (Author/PC)

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EFFECTS OF BACKGROUND, PERSONALITY, COLLEGE AND POST-COLLEGE
EXPERIENCES ON WOMEN'S POST-GRADUATE EMPLOYMENT.

by

Sandra Schwartz Tangri

U.S. Commission on Civil Rights
Washington, D.C.

July, 1974

U.S. DEPARTMENT OF HEALTH
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Manpower Administration

Associate Manpower Administration for
Policy, Evaluation, and Research

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Final Report

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U.S. DEPARTMENT OF LABOR

Manpower Administration

Associate Manpower Administration for
Policy, Evaluation, and Research

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CHAPTER I

Introduction

This is the report of a modest longitudinal study that followed a sample of women from their senior year in college in 1967 to their widely dispersed lives in 1970. The study focuses on their occupational aspirations and experiences and the determinants of those aspirations. Women often take jobs below their qualifications, or work less than full time, or drop out of the labor market after relatively short durations, or never work at all. In particular, women are most notably absent from those fields in which the social rewards are greatest, e.g., physical sciences, medicine, law, mathematics.¹ If we can identify the determinants of high occupational aspirations and high work commitment, we will be in a better position to fashion social policies which will encourage women to have such aspirations and commitment.

The entry of women into the labor market may be thought of as the result of cumulative experiences which shape their aspirations, motivations and role-conceptions. Previous work in this area has until recently been mostly on males. In part this may be because the number of occupations which account for 70 to 80 percent of the female labor force is so small (Alpenfels, 1962, p.73) and also perhaps because the size of the female labor force, particularly at the higher-paying professional levels is small and socially defined as marginal (Ibid, p.77; Caplow, 1958). The not very extensive literature falls into three broad categories: primarily demographic descriptions of the college-educated female work force; studies which explore some relationships between demographic and motivational variables; and the small sample studies which focus primarily on psychological questions.

Much of the first type of research has been done by the U.S. Department of Labor or other government agencies. The President's Commission on the Status of Women (1963) reports that the proportion of all degrees of higher education given to women were less in 1962 than they were in the 1930s. The proportion of doctorates awarded to women in 1969-70 just barely regains the lowest level achieved since 1919 (which was 11.3 percent in 1940-

¹This loss is increasing: "there was a significant decline in the proportion that women were of all professional and technical workers from 45 percent in 1940 and 42 percent in 1950 to 37 percent in 1965." (U.S. Dept. of Labor, 1965, p.83)

41; in 1969-70 it was 13.3 percent, Roby, 1973, p.40). Women are most underrepresented in the higher paying professions, business positions, and in the higher levels of public office (President's Commission, 1963).

An excellent example of the second kind of study, which does not focus on college women, however, is part of Productive Americans (Morgan, et.al., 1966). This work revealed the very significant role of social-psychological variables like husband's attitude toward whether mothers should work, toward importance of luck for financial success, and toward achievement and planning. Alice Rossi's illuminating work on women's choice of engineering, medicine and science (1965) also utilizes both demographic and more social-psychological data to demonstrate the impact of life-long sex-role socialization patterns on women's occupational choices. The research design of this study adds the longitudinal in-college data to her three years post-graduation design. Many of the same issues are treated, but some psychological dimensions (like achievement motivation, Motive to avoid success, self-concept, etc.) has been added.

The third type of literature on women's occupations is more psychological in that the main focus is supposed to be on individual differences; therefore, demographic variables are generally controlled rather than investigated. Under this general rubric, one relevant literature is concerned primarily with applications of personality differences to personnel selection and vocational counseling; the other with more theoretical problems regarding the relationship between motivation and level of performance. In the personnel and vocational literature, investigators have been quite shy of elaborating the area of female labor. For instance, in Super's book The Psychology Of Careers (1957), less than a dozen pages out of 322 are devoted to women and the remainder is not considered equally applicable to both sexes. His main contribution to this topic is a temporal typology of seven career patterns among women, with a rather brief discussion of what demographic factors are associated with each (primarily socioeconomic status). Substantially greater interpretation of the role of occupation in women's life styles is offered by Matthews and Tiedeman (1964), but there appears a curious disjunction between the detailed concern evidenced in the discussion of matching jobs with personalities and skills for men and the blanket treatment of all women at work as one category. For men, it is assumed that individual differences should play the major role in selection of occupation, whereas for women, it seems to be assumed that sex-role definition should take precedence over individual differences in selection of an appropriate occupation. There also seems to exist a fairly general assumption that only the small number of traditionally

feminine careers are compatible with being a woman. Thus, within a field generally identified as concerned with individual differences, the literature on vocations for women generally neglects these and concentrates on sex and other demographic variables. However, since the undertaking of this study, challenges to these assumptions have appeared in this field, most notably evidenced in the special issue on women of the Personnel and Guidance Journal (Lewis, 1972). Several major books have recently been published which challenge the existing sex-typing of spheres of accomplishment (Ross & Calderwood, 1974; Furniss & Graham, 1972; Mednick & Tangri, 1972; Mednick, Tangri & Hoffman, 1975).

The theory of achievement motivation has been developed largely on the basis of results with males, which have shown rather consistently that this motivation is related to risk-taking, work partner selection, problem-solving effectiveness, learning, academic performance, (see Lesser, Krawitz and Packard, 1963), entrepreneurial activity, occupational status, hourly earnings, number of hours worked, etc. (McClelland, 1961, Morgan, 1964). The results on women are not consistent with either the theory or the male results, nor internally consistent (Veroff, et.al., 1953; Lesser, et.al., 1963; Lipinski, 1965; French and Lesser, 1964; Sundheim, 1963; Baruch, 1967). The problem with the motivation-performance relationship in women may be attributed to inappropriate arcusal and/or assessment techniques which confound the relationship by failing to take account of the very real barriers to achievement which exist for women.

The barriers to achievement striving and occupational fulfillment for women exist within and outside of themselves. One of the internal barriers is the result of internalization of societal norms against competing with men. It takes the form of fear of success which is assessed through a projective technique and scoring system introduced by Matina Horner (1972). This new motivational measure is included in this study as well as the traditional measure of nAch. In addition, several new measures of achievement concerns are developed in this study, which successfully by-pass the conflict between approach and avoidance of success. These measures, called Implied Demand Character of the Wife's Future and Demand Character of the Future Husband, are based on Turner's (1964) suggestion that some highly achievement motivated women attempt to deal with these conflicts by displacing their achievement concerns onto husbands, thereby reducing their own occupational aspirations (Tangri, 1974).

For women in different circumstances, external barriers may take the form of job specifications with inflexible hours, anti-nepotism rules, or discrimination (Radcliffe Committee on

Graduate Education for Women, 1956; Cross, 1972). Experience with such barriers are an important part of the data collected in this study.

This study is unique in having a longitudinal design, a multi-factor causal model, and intensive interview as well as questionnaire data. A previous study by this investigator (Tangri, 1969; 1972) was concerned with predicting the likelihood of innovative occupational aspirations among these women from information about their background, personality, and college experiences which was collected during their senior year in college. Role-Innovators were defined as women who aspired to a male-dominated profession. Traditionals were the women who aspired to traditionally feminine careers. The Role-Innovation score is simply the sex-ratio in the occupation. The greater the proportion of men in the occupation, the higher the woman's Role-Innovation score. But the influences shaping occupational choice do not end with graduation. The follow-up study of these same women, collected three years after their graduation (in 1970), covers an important period in the woman's life cycle. This period is critical for long-term career development because decisions on marriage, family formation, graduate school and first job are all tested during this period. These decisions and feedback from them have important long-term consequences.

Not only is this period normally a critical one in the life-cycle, but the years between 1967 and 1970 saw the emergence of a political and social movement which is directly relevant to the concerns of this study, the women's liberation movement. The extent to which this alone has affected the women in this study is, of course, difficult if not impossible to determine. However, some information was collected on their attitudes toward the movement itself and in various ways on some of the issues to which the movement addresses itself.

Design of the Study

The initial data, collected in 1967, are part of a larger study of students at The University of Michigan (Gurin, 1971). That study (A Study of Students in a Multiversity, or the Michigan Student Study) contained a carefully designed random sample of approximately 350 women who had entered the College of Literature, Science and the Arts at the University in 1963 and were in their senior year when the initial data for the present study were collected. A sub-sample of 200 women were selected from these 350 for the present study as follows. Using their choice of occupation as stated in their senior year questionnaires, all the women were classified as Role-Innovators (occupations with fewer than 30

percent women in them), Moderates (occupations with 30 percent to 50 percent women in them), or Traditionals (occupations with more than 50 percent women). Using this classification, approximately one in five of the 350 women fell into the Innovator and Moderate categories, and three of five into the Traditional. All of the 65 Role-Innovators and 66 Moderates were included in the initial study, and a random sample of 69 Traditionals was selected for inclusion. Therefore, the original sample of 200 consists of one-third Role-Innovators, one-third Moderates, and one-third Traditionals.

Most of the data for the 1967 variables come from the extensive questionnaires and interviews given to these students by the Michigan Student Study in their senior year.² In addition, it was possible to get 118 of these 200 women to take additional projective tests to measure some personality variables of particular concern in this study (Need Achievement, Motive to Avoid Success, and a semantic differential description of "a career woman").

The follow-up data, collected in 1970, were obtained by means of interviews if physically possible, or questionnaires, which were mailed to respondents and were accompanied by postage paid, return addressed envelopes. Locating the respondents, many of whom had moved away from the University and taken on married names, was facilitated by the record-keeping of the University's Alumni Office and by the helpfulness of the women's families. Given these complexities, the completion rate of 75 percent (152 women) which was achieved is considered extremely successful. Even more fortuitously, the distribution of these 152 women maintained roughly the same equal representation of the original classification into Role-Innovators (50 women), Moderates (48 women), and Traditionals (54 women). Sixty-two persons were interviewed in person and ninety completed questionnaires. The information from the two methods is comparable in all major respects. For this reason, and for reasons of economy, an example of the questionnaire only is included in Appendix A.

Outline of the Report

This report presents the major findings from this study. It is divided into two parts. Part One (Chapters II and III) presents the analyses in terms of the original classification of respondents by their occupational aspirations in 1967. Chapter II summarizes briefly the previous findings regarding the background, personality

²For details on this study and the questionnaire used, see Gurin (1971).

and college experience factors associated with Role-Innovative aspirations, and presents additional information on these factors from the follow-up. Chapter III examines the post-graduation experiences of the respondents in education, work, marriage, and family formation. Part Two (Chapters IV and V) presents analyses in terms of a re-classification based on the respondents' present activity (rather than their earlier aspirations). Chapter IV presents the relationships between present Role-Innovation and various aspects of marriage, motherhood, work, and education. Chapter V examines the correlates of change in Role-Innovation from 1967 to 1970, and the relationship between past, present, and future (planned) Role-Innovation. Chapter VI presents a summary of the main findings, and some implications and recommendations of the study are presented in Chapter VII.

PART ONE

THE ORIGINAL GROUPS OF RESPONDENTS

AS CLASSIFIED BY THEIR OCCUPATIONAL ASPIRATIONS IN 1967

CHAPTER II

Pre-Graduation Determinants of Occupational Aspirations in 1967:

Family Background, Personality, and College Experience.

A detailed review of previous findings on the pre-graduation determinants of occupational aspirations is included for the convenience of the reader in Appendix B. Only a brief summary of the major findings is presented below so that comparisons with and extensions of those findings can be understood.

Summary of Previous Findings

The decisions made by these women during the four years of college seemed to represent an increase in sex-role stereotyping rather than an increase in diversification which a liberal arts education might be expected to produce. This stereotyping was particularly marked among Traditionals. There was greater homogeneity of interests of a stereotyped kind among Traditionals at every choice point (undergraduate major, graduate field, and occupation) than among Role-Innovators. What was different about the Role-Innovators as a group, was therefore not the fields that they chose, but the levels of accomplishment to which they aspire within those fields. Traditionals, on the other hand, not only have lower levels of aspiration, but as a group were more stereotyped in the fields of endeavor that they chose. Role-Innovators also changed fields less often than did Traditionals, and were therefore probably maximizing their performance. Yet they were also more likely to name a second occupational choice and one that is more feminine than their first choice, as a kind of "insurance policy" against the risks of competing in a man's world. This kind of contingency planning may have longer-range effects on women's likelihood of shifting occupations at later stages of the life-cycle. The Role-Innovators in this study expressed high commitment to their occupations and gave great importance to the role of their career in their post-graduate lives. Possible later failure to carry out these career intentions may therefore be attributable to causes outside themselves.

Maternal employment, masculinity of mother's occupation and each parent's education were all positively related to Role-Innovation. Several widely accepted notions about the kinds of women who aspire to male-dominated professions were shown to be unfounded by the original study. They did not show evidence of having identified with their fathers in preference over their mothers.

In fact, more educated working mothers, particularly those who are themselves in more male-dominated occupations, appear to have been taken as role-models by such daughters. Role-Innovative women did not reject the roles of wife and mother, though they expected to postpone marriage longer and have fewer children than more traditional women; nor did they think of themselves as "masculine" women. There is no evidence that they made such occupational plans because of difficulty in attracting the opposite sex, since they had as many romantic as well as casual relationships with men as did more traditional college women. Since their commitment to their careers was greater than that of women going into feminine professions even while they were in college, the decision to continue working cannot be viewed as merely being made by default when other alternatives fail.

The characteristics discovered to differentiate Role-Innovators and Traditionals most strongly were personality-motivational factors. As compared to the women going into feminine professions, they were more autonomous, individualistic, and motivated by internally imposed demands to perform to capacity. They also expressed more doubts about their ability to succeed and about identity, which reflects the fact that the roles they chose are more difficult in standards of performance and more ambiguous in social meaning. There was some indication that faculty in one's major field, and female college friends, provide some role-support, and that the right kind of boyfriend could be important at this stage of the life cycle.

Although hypotheses about maternal role-modeling and the supportive boyfriend were suggested by previous data, it was not possible to adequately test these on the data then available, since the instruments were not designed for this purpose. One of the objectives, therefore, of the follow-up study was to gather enough information to explore these relationships more fully. The distribution of the Role-Innovation scores (from 1967 aspirations) which defines the three groups is given in Table II-1. The actual occupations are given in Table III-18, p.78.

The 1970 Follow-Up Study

Before presenting the data upon which inferences will be made about the determinants of Role-Innovation, it seems only fair to present the Innovative women's own views in response to the direct questions "What or who got you interested in your field?" and "What do you think has made you one of the exceptions to stay in this field?" Forty-nine persons answered this question, five of whom were classified as Traditionals in 1967. Responses to the

Table II-1. Distribution of Role-Innovation Scores of First Occupational Choice (Aspiration) By 1967 Group

1967 Role-Innovators		1967 Moderates		1967 Traditionals	
% Men ¹	Frequency	% Men ¹	Frequency	% Men ¹	Frequency
98	2	69	21	46	4
97	1	65	1	45	1
96	1	64	1	39	1
94	2	63	6	38	4
93	2	62	3	33	1
92	1	61	5	32	2
91	2	59	1	28	5
89	2	57	1	27	1
88	4	55	8	23	9
87	7	51	<u>1</u>	14	5
			48		
86	1			12	11
85	3			4	1
84	3			2	<u>9</u>
					54
83	1				
79	1				
78	1				
77	3				
76	2				
75	4				
73	6				
71	<u>1</u>				
Totals	50				

1. The percent men in the first occupation chosen in 1967. This is also the 1967 Role-Innovation Score.

first question show little concentration on any single answer. The modal response, given by eight women, is "a course in this field", yet the more personalized influence of "a University faculty member" is mentioned by only four persons, and two persons name "someone in this field." The official Faculty Advisor, whose role it is to provide occupational counseling, is not mentioned at all. Instead, the next most frequent response was some kind of happenstance ("serendipity"), mentioned by seven women. The next most frequent mentions were the individual's own personal qualities of an intellectual or motivational nature, one's high school teacher, and a friend not at the University. These data are in Table II-2.

When the responses to this question are classified by the sex of the person who got the respondent interested in her field, it was surprising, given the fact that men dominate the innovative occupations (by definition), that an equal number of respondents mentioned women as mentioned men. The psychological importance of the few women who are in these fields, as role-models and possibly inspirations to women students, is thus much greater than their number would suggest. Perhaps because of the paucity of role-models, or for other reasons, almost half the women responding to this question did not mention any individuals as responsible for getting her interested in her field. These data are in Table II-3.

The second question, asking for reasons the respondent stayed in her field, yields a much more clear-cut pattern of responses. Of the 46 women answering this question, 39 percent refer to the intellectual appeal of the field ("strong interest," "stimulation," "my hobby as well as my work"), 26 percent refer to their own motivational qualities ("determination," "ambition," "definitely want a career," "desire to support myself," "I'm independent," "initiative"), and 13 percent refer to their ability and performance. Only three women mentioned encouragement from anyone in this connection, namely relatives or husband. As noted in the previous study and several other studies, extrinsic factors such as salary and job opportunities do not play much of a role in determining innovative choices even though these innovative choices almost inevitably bring higher material rewards than the traditionally feminine occupations. These data are in Table II-4.

Family Background: Role-Modeling

The relationships previously found between daughter's Role-Innovation and her mother's level of education, work history, and the innovativeness of mother's occupation, suggested that at least some of the Role-Innovators were taking their mothers as role

Table II-2. Source of Initial Interest in One's Field by 1967 Group,
For Women in Untraditional Fields in 1970

Source of Initial Interest	1967 Group			Total
	Innovator	Moderate	Traditional	
Father	2	0	0	2
Mother	1	1	0	2
Sister, Brother, Other Relative	2	0	0	2
High School Teacher	3	1	1	5
High School Counselor	1	0	0	1
U. of M. Faculty Other than Advisor	3	1	0	4
A Friend not at Michigan	2	0	2	4
A Friend at Michigan	1	0	0	1
A Course in This Field	5	1	2	8
A Summer, Temp., or Part- Time Job	0	1	0	1
Personal Qualities of Intellectual Nature	2	2	0	4
Personal Qualities of Motivational Nature	3	2	0	5
Schoolwork Prior to College	0	1	0	1
Serendipity	4	3	0	7
Someone in Field	1	1	0	2
Official Faculty Advisor at U. of M.	0	0	0	0
Total	30	14	5	49

Table II-3. Sex of Person Who Got Respondent Interested in Field,
By 1967 Group

	Innovator		Moderate		1967 Group Traditional		Total	
	N	%	N	%	N	%	N	%
Female	4	14.8	2	15.4	1	14.3	7	14.9
Male	6	22.2	0	0.0	1	14.3	7	14.9
Both Sexes Mentioned	1	3.7	3	23.1	0	0.0	4	8.5
Sex of Person Undetermined	4	14.8	1	7.7	1	14.3	6	12.8
No Individuals Mentioned	<u>12</u>	<u>44.4</u>	<u>7</u>	<u>53.8</u>	<u>4</u>	<u>57.1</u>	<u>23</u>	<u>48.9</u>
Total	27	100.0	13	100.0	7	100.0	47	100.0

Table II-4. Explanation Woman Gives for Staying in Innovative Field, By 1967 Group

	Innovator		Moderate		1967 Group		Traditional		Total	
	N	%	N	%	N	%	N	%	N	%
Determination; Ambition; Definitely want a Career; Desire to Support Myself; I'm more Independent than most women; Initiative and Willingness to Put up with Unpleasantness	6	23.1	6	40.0	0	0.0	0	0.0	12	26.1
Strong Interest in Field; Enjoy it; My Hobby as Well as Work; Stimulation; At Ease in my Field	11	42.3	5	33.3	2	40.0	2	40.0	18	39.1
I Prefer Working with Men	1	3.8	0	0.0	0	0.0	0	0.0	1	2.2
Material Factors, Salary, Job Opportunities	1	3.8	0	0.0	1	20.0	1	20.0	2	4.3
Encouragement from Relative (s)/Husband	2	7.7	1	6.7	0	0.0	0	0.0	3	6.5
I don't Feel I'm an Exception; More Women are Entering my Field	1	3.8	0	0.0	0	0.0	0	0.0	1	2.2
Ability; High Intelligence; Got Fellowship; Did Well	3	11.5	1	6.7	2	40.0	2	40.0	6	13.0
I don't Define Myself as a woman	1	3.8	0	0.0	0	0.0	0	0.0	1	2.2
I did not Stay in Field	0	0.0	2	13.3	0	0.0	0	0.0	2	4.3
Total	26	100.0	15	100.0	5	100.0	5	100.0	46	100.0

models. This interpretation, however, also had to take into account some very complex relationships concerning the daughter's feelings about various aspects of her relationship with her mother. The general impression left by those data was that there was disagreement and probably conflict between mother and daughter over certain matters, yet closeness and warmth between them as well. It appeared that role-modeling was more likely among the women whose mothers had more education. To explore the question of role-modeling further, a series of questions were asked in the follow-up study about the woman's perception of her mother's and father's performance in various roles, and in which of these roles would she be satisfied to be like them. The data are presented in Table II-5.

In general, both parents are rated rather favorably, with the highest marks going for the performance of work roles, and next highest for their roles as parents. The least favorable ratings are given to both parents in their roles as citizens (one fourth rated their fathers as "poor" in this respect and one fifth rated their mothers "poor"). Performance as a spouse and the marriage itself received moderately favorable ratings: only eleven to twelve percent rated each parent and the marriage as "poor".

The largest difference between the ratings of the two parents is, as expected, in their capacity as earners, with less than ten percent of the mothers rated excellent in this regard as compared to almost half of the fathers. Other overall differences between the parents were quite small. The next largest parent difference was in their ratings as workers "in terms of doing their best and deriving satisfaction from their work", with 72 percent of the fathers and 63 percent of the mothers receiving excellent ratings. Mothers received only slightly better marks than fathers as workers in the home.

Since the critical interest here is the hypothesis that Role-Innovators and Traditionals are differentially selective in the aspects in which they model their mothers, attention here is focussed on these differences, rather than on those concerning the father. For five out of the seven roles on which mothers are rated, Traditionals are more lavish in their ratings of "excellent" than are the Role-Innovators. When we combine the percentages of "good" and "excellent" ratings, the pattern becomes even stronger, leaving only one exception: Innovators give their mothers a slight edge over Traditionals' ratings of mother as one who does her work well and derives satisfaction from it (but even here, both ratings are extremely high). The largest of the differences in favor of the Traditionals' ratings of their mothers is on the role of spouse (and it is the only statistically significant difference).

Table II-5 - continued

Role	Rating of Mother				Rating of Father				Total							
	Innovator N	Innovator %	Moderate N	Moderate %	Traditional N	Traditional %	Moderate N	Moderate %	Traditional N	Traditional %	Total N	Total %				
<u>Worker</u>																
Excllnt.	22	59.5	21	56.8	29	72.5	72	63.2	38	76.0	28	62.2	41	77.4	107	72.3
Good	12	32.4	9	24.3	6	15.0	27	23.7	9	18.0	13	28.9	10	21.6	32	21.6
Satisf.	3	8.1	5	13.5	3	7.5	11	9.6	0	0.0	3	6.7	1	1.9	4	2.7
Poor	0	0.0	2	5.4	2	5.0	4	3.5	3	6.0	1	2.2	1	1.9	5	3.4
							114	100.0							148	100.0
<u>Earners</u>																
Excllnt.	6	12.0	4	8.3	3	5.1	13	8.6	27	54.0	22	48.9	20	37.0	69	46.3
Good	9	18.0	9	18.8	14	26.4	32	21.2	17	34.0	16	35.6	25	46.3	58	38.9
Satisf.	7	14.0	11	22.9	6	11.3	24	15.9	6	12.0	7	15.6	9	16.7	22	14.8
Poor	0	0.0	1	2.1	2	3.8	3	2.0	--	--	--	--	--	--	--	--
No pay	28	56.0	23	47.9	28	52.8	79	52.3	--	--	--	--	--	--	149	100.0
							151	100.0								

Parents Marriage	Innovator		Moderate		Traditional		Total	
	N	%	N	%	N	%	N	%
Excllnt.	20	40.0	17	37.0	23	42.6	60	40.0
Good	12	24.0	12	26.1	19	35.2	43	28.7
Satisf.	10	20.0	12	26.1	7	13.0	29	19.3
Poor	8	16.0	5	10.9	5	9.3	18	12.0
							150	100.0

$t_{M,T}=1.7567, p<.05$

 $t_{M,T} = 1.7567, p < .05$

Eighty-one percent of the Traditionals rate mother as good or excellent in this role as compared to 61 percent of the Role-Innovators. The interpretation of this finding is still not clear, and there are several possibilities. A similar difference occurs in the ratings of fathers as spouse, and is even more significant. However, if we separate the excellent and good ratings, both parents receive a slightly higher proportion of excellent ratings from the Role-Innovators than from the Traditionals. Like the earlier data, these perceptions of parents yield a complex pattern which does not give clear-cut support to the hypothesis. Further differentiation of the respondent groups according to mother's education was undertaken to help clarify the relationships involved. In Table II-6, the mean ratings for each parent in each role are presented for women with more educated mothers only. With two exceptions, these Role-Innovators rate their mothers more highly than do the Traditionals. However, only one of these is significant.

The second question deals somewhat more directly with the concept of modeling by asking respondents to indicate ways in which she would be satisfied to be like either of her parents. These data are in Table II-7. Perhaps the most notable characteristic of this Table is how few women choose one parent over the other to emulate in any of the roles. Choosing both is much more common. This underscores the point that insofar as the concept of identification includes modeling it is not an exclusive process which involves only one parent. Neither is it the case that emulation of one parent carries across all the roles that the parent plays. Fathers are more attractive models as earners, workers, and spouses, but not as citizens or parents. Furthermore, in three out of five roles--spouse, citizen, and earner--the modal response is to reject both parents as models. This may reflect the fact that the spouse role is undergoing a significant change in definition as part of the women's liberation movement; that the standards of citizenship are being upgraded by this cohort of students who witnessed the peak of student political activity on campus; and that in the case of "earner" these women like everyone else, expect to be upwardly mobile.

Surprisingly, comparisons of the groups show that Traditionals are more likely than Role-Innovators to reject both parents in the three more public roles: citizen, earner, and worker. Role-Innovators are considerably more likely than Traditionals to consider both parents' earning capacity emulous (26 percent vs. 11 percent). This is consistent with our earlier findings that Role-Innovators' mothers (as well as fathers) were more likely to be employed and in more masculine (therefore, better-paying) occupations.

Table II-6. Mean Ratings of Each Parent in Various Roles, By 1967 Group,
for Daughters Whose Mothers Have a College Education

Role	Mother			Father		
	1	2	3	1	2	3
	<u>Innovator</u>	<u>Moderate</u>	<u>Traditional</u>	<u>Innovator</u>	<u>Moderate</u>	<u>Traditional</u>
Parent						
$\bar{x}$	3.000	3.2631	3.4615	3.0555	3.000	3.333
S.D.	.8165	.8489	.7460	.9704	1.000	.8500
N	18	19	13	18	18	12
	$t_{1,3}=1.5777$	$df=29$ n.s.		$t_{2,3}=.4007$	$df=28$ n.s.	
Spouse						
$\bar{x}$	3.1764	3.0588	3.0833	3.0555	2.9411	3.2307
S.D.	.9845	1.0556	.8621	1.1784	1.0558	.5760
N	17	17	12	18	17	13
Parent's Marriage						
$\bar{x}$	3.0555	3.0588	2.4615			
S.D.	1.1292	.9375	.8292			
N	18	17	13			
	$t_{2,3}=1.7915$	$df=28$ $p<.05$				
	$t_{1,3}=1.6332$	$df=29$ n.s.				
Citizen						
$\bar{x}$	2.4444	2.5263	3.2500	2.3888	2.5555	3.000
S.D.	.8316	1.2719	.8292	1.0616	1.3007	1.000
N	18	19	12	18	18	12
	$t_{1,3}=2.5080$	$df=28$ $p<.01$		$t_{1,3}=1.5418$	$df=28$ n.s.	

Table II-6 - continued

Role	Mother			Father		
	1 Innovator	2 Moderate	3 Traditional	1 Innovator	2 Moderate	3 Traditional
Worker in Home						
$\bar{x}$	3.0833	3.3333	3.6250	2.8000	3.4444	3.2857
S.D.	.9539	1.0137	.6960	1.2490	.9560	.6999
N	12	12	8	10	9	7
	$t_{1,3}=1.3896 \quad df=18 \quad n.s.$					
Worker in Job						
$\bar{x}$	3.6875	3.6000	3.2222	3.7777	3.6666	3.7500
S.D.	.4636	.8794	1.2263	.7118	.5777	.8292
N	16	15	9	18	18	12
As earner						
$\bar{x}$	1.6666	1.7894	1.5000	3.5000	3.3888	3.4615
S.D.	1.5987	1.5072	1.5545	.6872	.6786	.6346
N	18	19	12	18	18	13

Table II-7. Roles In Which Woman Would "Be Satisfied To Be Like"
Her Parent. By 1967 Group

	1967 Group							
Role	Innovator		Moderate		Traditional		Total	
	N	%	N	%	N	%	N	%
<u>Parent</u>								
Mother	8	17.0	11	25.0	2	3.8	21	14.6
Father	4	8.5	6	13.6	12	22.6	22	15.3
Both	20	42.6	12	27.3	27	50.9	59	41.0
Neither	<u>15</u>	<u>31.9</u>	<u>15</u>	<u>34.1</u>	<u>12</u>	<u>22.6</u>	<u>42</u>	<u>29.2</u>
	47	100.0	44	100.0	53	100.0	144	100.0
	$\chi^2=15.67097$ df=6 p<.025							
<u>Spouse</u>								
Mother	0	0.0	5	11.4	3	5.7	8	5.6
Father	5	10.6	5	11.4	8	15.1	18	12.5
Both	19	40.4	14	31.8	19	35.8	52	36.1
Neither	<u>23</u>	<u>48.9</u>	<u>20</u>	<u>45.5</u>	<u>23</u>	<u>43.4</u>	<u>66</u>	<u>45.8</u>
	47	100.0	44	100.0	53	100.0	144	100.0
<u>Citizen</u>								
Mother	9	19.1	4	9.1	2	3.8	15	10.4
Father	7	14.9	3	6.8	3	5.7	13	9.0
Both	12	25.5	16	36.4	21	39.6	49	34.0
Neither	<u>19</u>	<u>40.4</u>	<u>21</u>	<u>47.7</u>	<u>27</u>	<u>50.9</u>	<u>67</u>	<u>46.5</u>
	47	100.0	44	100.0	53	100.0	144	100.0
<u>Earners</u>								
Mother	4	8.5	2	4.5	5	9.4	11	7.6
Father	17	36.2	18	40.9	19	35.8	54	37.5
Both	12	25.5	6	13.6	6	11.3	24	16.7
Neither	<u>14</u>	<u>29.8</u>	<u>18</u>	<u>40.9</u>	<u>23</u>	<u>43.4</u>	<u>55</u>	<u>38.2</u>
	47	100.0	44	100.0	53	100.0	144	100.0
<u>Worker</u>								
Mother	3	6.4	6	13.6	2	3.8	11	7.6
Father	12	25.5	8	18.2	9	17.0	29	20.1
Both	23	48.9	16	36.4	27	50.9	66	45.8
Neither	<u>9</u>	<u>19.1</u>	<u>14</u>	<u>31.8</u>	<u>15</u>	<u>28.3</u>	<u>38</u>	<u>26.4</u>
	47	100.0	44	100.0	53	100.0	144	100.0

In the more private roles of parent and spouse somewhat different patterns emerge. The modal response for both groups on the parental role, is to say both parents are emulous, whereas the next most frequent response for both groups is to reject both parents. Of those who choose between parents, Innovators are more likely to prefer their mother as a parent role-model, whereas Traditionals are more likely to prefer their father. More clearly than any of the other data discussed so far, these argue against the notion that Role-Innovators have experienced cross-sex parental identification.

Unlike the previous question, on the question regarding the spouse role, the modal answer for both groups is to reject both parents as models, followed very closely, however, by accepting both as models. Among the few that do choose between their parents, both groups are more likely to prefer the father as a model in this role. The most striking feature of this sub-table is the total absence among Innovators of preference for the mother as a model for the role of spouse. If we compare the figures for the two groups which treat both parents alike (either reject or accept) with those that treat them differently (preferring one), the former constitute 89 percent of the Innovators, and 79 percent of the Traditionals. We might infer that Role-Innovators have somewhat more egalitarian preferences for the spouse role, but share with the Traditionals a preference for the masculine perquisites of the role. In short, Role-Innovators seem more likely to make reciprocal judgements (the success or failure of each parent reflects on the other), but where a preference does exist, the mother appears more emulous in the parent role, whereas the father appears more emulous in the spouse role. This would be consistent with defining the requirements of the parent role in more affective, nurturant terms (as is often more true of mothers than of fathers), and defining the requirements of the spouse role in more ascendant, ego-enhancing terms (as is often more true of husbands than of wives).

Table II-8 presents these data for women with more educated mothers. A comparison of Table II-6 and II-6a for each group shows that with the exception of the spouse role, these Innovators are more likely to find their mother or both parents emulous, and less likely in general to find their father emulous or to reject both parents. For Traditionals, there is not so clear a pattern of differences although in three roles out of five they are more likely to find one parent or the other emulous. These data lend support to the portrait of the Role-Innovator daughter of a more educated mother as drawn from previous data.

Table II-8. Roles In Which Woman Would "Be Satisfied To Be Like" Her Parent, By 1967 Group, For Women Whose Mothers Have A College Education

Role	Innovator		Moderate		Traditional		Total	
	N	%	N	%	N	%	N	%
<u>Parent</u>								
Mother	4	23.5	8	44.4	2	16.7	14	29.8
Father	2	11.8	1	5.6	4	33.3	7	14.9
Both	7	41.2	4	22.2	4	33.3	15	31.9
Neither	4	23.5	5	27.8	2	16.7	11	23.4
	17	100.0	18	100.0	12	100.0	47	100.0
<u>Spouse</u>								
Mother	0	0.0	4	22.2	1	8.3	5	10.6
Father	1	5.9	0	0.0	5	41.7	6	12.8
Both	8	47.1	6	33.3	3	25.0	17	36.2
Neither	8	47.1	8	44.4	3	25.0	19	40.4
	17	100.0	18	100.0	12	100.0	47	100.0
$\chi^2=16.89362$ df=6 p<.01								
<u>Citizen</u>								
Mother	4	23.5	2	11.1	2	16.7	8	17.0
Father	2	11.8	0	0.0	1	8.3	3	6.4
Both	5	29.4	8	44.4	6	50.0	19	40.4
Neither	6	35.3	8	44.4	3	25.0	17	36.2
	17	100.0	18	100.0	12	100.0	47	100.0
<u>Earners</u>								
Mother	2	11.8	1	5.6	1	8.3	4	8.5
Father	4	23.5	4	22.2	3	25.0	11	23.4
Both	8	47.1	3	16.7	3	25.0	14	29.8
Neither	3	17.6	10	55.6	5	41.7	18	38.3
	17	100.0	18	100.0	12	100.0	47	100.0
<u>Worker</u>								
Mother	2	11.8	3	16.7	0	0.0	5	10.6
Father	2	11.8	3	16.7	3	25.0	8	17.0
Both	11	64.7	7	38.9	5	41.7	23	48.9
Neither	2	11.8	5	27.8	4	33.3	11	23.4
	17	100.0	18	100.0	12	100.0	47	100.0

Personality

The kinds of personality constructs investigated in the follow-up study grew directly out of the earlier findings. In order, therefore, to follow this presentation it is recommended that the summary of those results presented in Appendix B be read before proceeding. Definitions of the variables, including new measures of achievement-related motives, the distinction between intrinsic and extrinsic motives, and the common and differentiating patterns of these motives in the two criterion groups are in pages 281 through 284 of that Appendix.

Achievement Related Motivations. Among the particularly interesting measures created for the initial study were several projective items whose scoring depended upon the use of trained raters who had achieved an acceptable level of inter-coder reliability. Although successfully used in the earlier analysis, it was felt that a less labor-intensive and even more reliable technique for assessing the same dimensions would be desirable. To this end a series of questions regarding the sources of satisfaction which the respondent experienced at work were asked which aimed to differentiate the various intrinsic and extrinsic motives. For instance, the Demand dimension was defined as the amount of demand an individual appears to make on herself for long-continuing effort, challenge, and risk-taking. In the present study, respondents were asked the extent to which any of the following contribute to their satisfaction with their job: a) "it demands a lot from me, not just physically but especially in other ways " (Demand); b) "there is no-one sitting in judgement of me. I have to meet my own standards, not someone else's most of the time " (Autonomy); c) "there are aspects to my job which are unknown, untried. I might have to risk failure to come up eventually with a success " (Risk); d) "there is substantial challenge in this job. It is necessary to grow in this job to keep up with it " (Challenge). Each of these taps a part of the original Demand dimension, and like it, are considered indicative of intrinsic motivation. The items reflecting concern with extrinsic aspects or rewards of the job were as follows: e) "the job meets some of my basic practical requirements in terms of salary, hours, and/or location" (Practical); and f) "The setting in which I work is good; well-organized, fairly well-financed, adequately staffed" (Setting). Two items were included that are not considered either clearly intrinsic or extrinsic factors: g) "The people that work with me make this job satisfying. They are intelligent, interesting, sympathetic" (Co-workers); and h) "I work with people rather than things" (People). Respondents indicated whether each item was a major source of satisfaction, a source of some satisfaction, or did not contribute to their satisfaction with the job.

Before discussing the relationships between these items and the original motivational measures, two limitations of the data must be born in mind. The first is that the items were presented with the fixed response alternatives only in the Questionnaires, which were designed partly on the basis of results with the Interviews. Therefore, if an Interviewee in response to the open-ended question "What, if anything, do you like about your job? What aspects do you find satisfying?", mentioned any of the above items that response was scored as equivalent to the fixed alternative "a major source of satisfaction," since a spontaneous mention in an open-ended response is assumed to reflect high salience. However, if there was no mention in the Interviewee's response to the open-ended item, it was treated as no information, since there was no basis for choosing between an interpretation of absence of satisfaction from that item or simply less salient satisfaction. The second limitation in the interpretation of these items derives from the fact that they were asked only of persons presently working, thus excluding most of the full-time graduate students and housewives. This excluded up to sixty-eight persons.

The correlation matrix for the old and new motive measures are presented in Table II-9. Of the statistically significant correlations among the clearly extrinsic and intrinsic motives, fourteen are in the direction expected (positive between two intrinsic or two extrinsic factors, negative between an intrinsic and an extrinsic factor), and six are not. This is not very strong evidence for the differentiation of measures reflecting two different concepts. In general the correlations among the new variables are stronger and more consistent than between these and the earlier measures. In particular, Risk, Demand, and Challenge form a strong cluster of interrelationships, all positive and all statistically significant. Furthermore, the two extrinsic factors, Setting and Practical, are significantly correlated as well. These figures are underlined in the Table. The Co-Worker variable, on the other hand, shares variance with some items from both of these clusters, and Working With People seems more closely related to extrinsic factors than to intrinsic factors. Most surprising in this matrix is the finding that Autonomy is correlated with the extrinsic factors from both the old and new set of variables rather than with the intrinsic factors. This may be because the more intrinsically motivated Innovators are further from completion of their training than the Traditionals who may already be enjoying greater autonomy in the work setting.

The strong positive correlation between the intrinsic variable "Risk" and the extrinsic variable "Importance of Leadership" perhaps supports rather than diminishes the conclusion drawn from earlier results that of the extrinsic motivators, prominence was

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Table 11-9. Correlation Matrix of Achievement Orientation Measures and Sources of Job Satisfaction

	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	Imp. Of Education	Imp. Of Salary	Be Famous Be Leader	Be Famous Be Leader	Wife Demand	Husband Demand	M Ach	Motiv Avoid Success	Future Work Excels	Demand	Autonomy	Practical	Easy	Co- Workers	Challenged Setting	Setting	People
1 Advancement	.1897*** (152)	.4592*** (151)	.0676 (152)	.0281 (152)	-.2586*** (151)	-.1377*** (151)	.0912 (93)	-.0272 (93)	.0120 (149)	.2049** (59)	-.1884*** (66)	-.1046 (74)	.2029*** (57)	.1263* (75)	.0873 (67)	-.0013 (61)	-.2286*** (84)
2 Leadership		.1049*	.0257	-.2071***	-.0589	.0454	.0932	-.0950	-.0656	.2285**	-.0276	.0351	.1684***	.0022	.2188***	.0206	.2479***
3 Salary			.0470	-.0036	-.2184***	-.0610	-.0379	-.0332	-.0313	.0389	-.2305**	.1234	.0344	-.0281	.0330	.1503*	-.0357
4 Be Famous				-.1124*	-.0590	-.0618	.0050	.0222	-.1682***	-.0955	-.0458	.0164	-.1116	-.0508	-.1379*	.0202	.0259
5 Be Leader					-.0428	-.0890*	-.0836	.0510	.0369	-.1246	-.1467*	-.1199	.0011	.1270	-.1399*	.0972	-.1412*
6 Wife Demand						.5107***	.0309	-.0706	.0594	.1991* (36)	.2735**	.1166	.1336	.1470	.2234*	.2516*	.3091**
7 Husband Demand							-.0273	.0047	-.0132	.2283*	.0535	-.1651*	-.0763	-.0609	.3082**	-.0115	.2516*
8 M Ach								-.0171 (93)	.0007 (92)	.2537 (35)	.2756 (39)	-.0099 (46)	-.1190 (35)	-.2444*** (46)	.2398 (38)	-.2367*	-.1123 (50)
9 M Avoid Success									-.1904**	-.1730	.1270	-.828**	-.1083	-.5607***	-.2291	-.4290**	-.2447
10 Future Work Excels										-.1277 (57)	-.0279 (64)	-.0488 (72)	-.0693 (55)	.0530 (73)	-.0417 (65)	-.1232 (61)	.0405 (81)
Job Satisf. Demand											.0610 (57)	-.0733 (58)	.3092*** (56)	.1209 (58)	.5394*** (59)	-.2036*** (57)	-.0586 (57)
11 Autonomy												.2252**	.0920	.0132	-.0087	.0843	.1482*
12 Practical																	
13 Risk																	
14 Co-workers																	
15 Challenge																	
17 Setting																	

* p .05
** p .01
*** p .001

† Extrinsic Motives
‡ Intrinsic Motives

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the least desired by Innovators because it arouses the greatest anxiety over loss of femininity and sex-role inappropriateness (Motive to Avoid Success). Thus, to aspire to leadership in the work setting, does entail serious psychological (as well as more palpable) risks.

Felt Conflict Between Desire for Marriage and Career. This question was also asked in 1967. Then, as now, more Innovators than Traditionals report feeling conflict between wanting marriage and wanting a career, in fact, twice as many. And twice as many Traditionals as Innovators say they do not want a career. Traditionals' modal response to this question is that they want both but do not feel there is any conflict; for Innovators this response is less typical. The data are in Table II-10.

In a conflict between two incompatible goals, resolution requires the renunciation of one or both goals. Since renouncing a career is far easier for women than renouncing marriage, and since for some women early marriage might remove the psychological barriers to pursuing a career (while possibly creating others), we expected degree of conflict to be related to how soon the respondent would get married. These data are shown in Table II-11, but the relationship is not apparent. For those who have married, the average interval between graduation and marriage is roughly 16 months. More interesting, however, is the fact that most of the women who expressed strong conflict or said they wanted no career in 1967 have married. This is not true of the women who said they felt some conflict, or wanted both marriage and a career but felt no conflict. In addition, the marginals in Table II-12 show that the number of women feeling "some" conflict among these women who are now married, has doubled since 1967, and the number feeling there is no conflict between these goals has dropped by one-fifth.

Table II-13 presents the mean interval between Graduation and marriage by the expression of conflict in 1967 and 1970. Comparing column Means, we find that those not wanting a career married soonest, those wanting both marriage and a career married about two months later, regardless of expressed conflict. This does not suggest earlier marriage as a mechanism for reducing psychological conflict, but if anything, a realistic postponement of the goal of marriage which could create real conflict while pursuing another goal. However, the row Means strongly suggest that those expressing conflict between these goals in 1970 did marry sooner than those not feeling conflict in 1970, though not as quickly as those not wanting a career. Those who expressed conflict in 1967 but no longer do so, waited the longest to marry (almost 2 years after graduation). It does not seem that earlier marriage creates more freedom from conflict, but rather increases it or eliminates the

Table II-10. Conflict Felt Between Marriage And Career In 1970, By
1967 Group

	1967 Group			
	<u>Innovator</u>	<u>Moderate</u>	<u>Traditional</u>	<u>Total</u>
Strong Conflict	2	0	0	2
Some Conflict	22	15	13	50
No Marriage	1	0	0	1
No Career	6	8	13	27
Want Both, No Conflict	<u>19</u>	<u>24</u>	<u>28</u>	<u>71</u>
Total	50	47	54	151

Table II-11. Interval Between Graduation And Marriage, By Conflict Expressed In 1967

Conflict in 1967	Married Before B.A.	B.A. - Marriage Interval						
		0-6	7-12	Months		25-30	31-36	Total
				13-18	19-24			
Strong	1	0	0	2	1	0	0	4
Some	1	3	0	5	1	3	1	14
No Marriage	0	0	0	1	0	0	0	1
No Career	1	8	4	2	7	2	1	25
Want Both, No Conflict	1	12	5	15	11	5	2	<u>51</u>
								95

Table II-12. Interval Between Graduation And Marriage, By Conflict Expressed In 1970

Conflict in 1970	Married Before B.A.	B.A. - Marriage Interval						Total
		0-6	7-12	Months		25-30	31-36	
				13-18	19-24			
Strong	0	2	0	0	0	0	0	2
Some	2	6	0	13	6	2	0	29
No Marriage	0	0	0	0	0	0	0	0
No Career	0	11	3	2	4	2	1	23
Want Both, No Conflict	2	6	4	9	10	6	3	<u>40</u>
								94

Table II-13. Mean Interval In Months Between Graduation And Marriage,
By Conflict Felt In 1967, And By Conflict Felt In 1970

		<u>Marriage-Career Conflict In 1967</u>				<u>Total</u>
		<u>Want Both, No Conflict</u>	<u>Want Both, Conflict</u>	<u>Don't Want Career</u>	<u>Don't Want Marriage</u>	
<u>Marriage-Career Conflict In 1970</u>						
Want Both, No Conflict	N	15.917 (24)	21.600 (5)	16.182 (11)	-	16.7000 (40) 42.6%
Want Both, Conflict	N	15.000 (15)	12.500 (10)	9.400 (5)	15.000 (1)	13.2903 (31) 33.0%
Don't Want Career	N	11.909 (11)	9.333 (3)	10.000 (9)	-	10.8260 (23) 24.5%
Mean Interval	N	14.760 (50) 53.2%	14.500 (18) 19.14%	12.600 (25) 26.59%	15.000 (1) 1.06%	(94) 100.0%

career goal from contention. Even among those who in 1967 did not want a career but now want both career and marriage, the women who express no conflict over this married considerably later than those who do express conflict. Thus for every kind of woman, earlier marriage appears to increase rather than allay inter-role conflict. This finding is contrary to our hypothesis. It is also interesting that the only two women who expressed "strong" conflict (as opposed to "some") were both married. Table II-14 presents expressed conflict by Marital Status.

Finally, although marriage in itself does appear to make a significant difference in the conflict expressed by these women, the man's attitude is also critical. This is dramatically shown in Table II-15. This Table includes the engaged and going steady women. Women whose consort is favorable toward their having a career (as reported by the women) are more than three times as likely to be without conflict as women whose consort has "neutral" attitudes, and six times as likely as women whose consort is unfavorable. Similarly, the latter are much more likely to say they don't want a career, than the former.³

Similar considerations about the possible role of pregnancy persuaded us to look at the timing of the first birth relative to graduation by expressed conflict in 1967 (Table II-16) and 1970 (Table II-17). However, what we find is that the timing is a function of the presence of two goals rather than the presence of conflict over those goals: women who in 1967 said they wanted both marriage and a career had their first baby about half a year later than the other women; and of those who felt conflict, almost 90 percent have still not had babies. According to the 1970 statement of conflict, however, we find the anomaly that although most of those feeling no conflict have still not had babies (almost 90 percent), yet those that did have babies had their first baby somewhat earlier than those now experiencing conflict. Thus the most conflict is experienced in the earliest phase of child rearing.

The Motive to Avoid Success can also be viewed as a measure of conflict since it expresses the anxiety about success which is created by the incompatible goals of success and femininity. If marriage is in part a mechanism intended to resolve this conflict, we should expect to find Motive to Avoid Success positively related

³However, a somewhat different light on these data is shed by considering the change in conflict reported between 1967 and 1970. This is discussed in Chapter V.

Table II-14. Conflict Felt In 1970 By Marital Status (1970)

Conflict 1970												
Marital Status	Strong		Some		None		No Career		No Marriage		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Married	2	2.2	27	29.3	40	43.5	23	25.0	0	0.0	92	100.0
Engaged	0	0.0	3	33.3	5	55.6	1	11.1	0	0.0	9	100.0
Going Steady	0	0.0	4	23.5	10	58.8	3	17.6	0	0.0	17	100.0
Single	<u>0</u>	0.0	<u>16</u>	48.5	<u>16</u>	48.5	<u>0</u>	0.0	<u>1</u>	3.0	<u>33</u>	100.0
	2		50		71		27		1		151	

Table II-15. Conflict Felt In 1970 By Man's Attitude Toward Wife
Having A Career (1970), For Attached Women Only

Man's Attitude Toward Wife Having a Career	Conflict 1970											
							No Career		No Marriage		Total	
	Strong		Some		None							
	N	%	N	%	N	%	N	%	N	%	N	%
Favorable	1	1.72	17	29.3	38	65.5	2	3.4	0	0.0	58	100.0
Neutral	1	2.43	14	34.1	12	29.3	14	34.1	0	0.0	41	100.0
Unfavorable	<u>0</u>	<u>0.0</u>	<u>1</u>	<u>10.0</u>	<u>1</u>	<u>10.0</u>	<u>8</u>	<u>80.0</u>	<u>0</u>	<u>0.0</u>	<u>10</u>	<u>100.0</u>
	2	1.8	32	29.4	51	46.8	24	22.0	0	0.0	109	100.0

Table II-16.. Interval Between Graduation And Birth Of First Child, By Conflict Felt In 1967

Marriage-Career Conflict Felt in 1967	Interval							Mean Interval in Months (N)	Never Preq.	% Of Each Conflict Category	Total	%
	Months											
	0-9	10-12	13-18	19-24	25-30	31-36	37-40					
Want Both	1	1	3	0	4	4	4	27.0 (17)	69	80.2	86	56.6
No Conflict												
Yes, Conflict	0	0	2	0	0	0	2	26.8 (4)	30	88.2	34	22.4
Don't Want Career	1	0	0	2	2	0	0	20.6 (5)	22	81.5	27	17.8
Don't Want to Marry	0	0	0	2	0	0	0	21.5 (2)	3	60.0	5	3.3
Total No.	2	1	5	4	6	4	6	(28)	124		152	100.0
Percent	7.1	3.6	17.9	14.3	21.4	14.3	21.4	100.0 [18.4%]				
									[81.6%]			[100.0%]

Table II-17. Interval Between Graduation And Birth Of First Child, By Conflict Felt In 1970

Marriage-Career Conflict Felt in 1970	Interval							Mean Interval in Months (N)	Never Preg.	% Of Each Conflict Category	Total	%
	Months											
	0-9	10-12	13-18	19-24	25-30	31-36	37-40					
Want Both	2	1	0	0	2	2	1	22.7 (8)	63	88.7	71	47.0
No Conflict												
Yes, Conflict	0	0	3	2	1	0	4	26.9 (4)	42	80.8	52	34.4
Don't Want Career	0	0	2	1	3	2	1	26.6 (1)	18	66.7	27	17.9
Don't Want to Marry	0	0	0	1	0	0	0	21.5 (1)	0	0.0	1	.7
Total No.	2	1	5	4	6	4	6	(28)	123		151	100.0
Percent	7.1	3.6	17.9	14.3	21.4	14.3	21.4	100.0				
								[18.5%]	[81.6%]			[100.0%]

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to marital status. The data in Table II-18 are consistent with this hypothesis. Only fourteen percent of the women who were high in Motive to Avoid Success in 1967 are still single, as compared to 22 percent of those who did not score any MavS. The high MavS women are also somewhat more likely than those low in MavS to have married men with a favorable attitude toward their having a career.

Fertility Risk-Taking. Another mechanism for resolving the conflict between marriage and career, is to foreclose the possibility of embarking on a career and the training it requires, by surrendering the decision to "fate", otherwise known as the "accidental" pregnancy. It was therefore attempted to develop a few items which might provide this kind of information. The first of these three items were: "Which way do you feel about having children? Would you prefer letting nature take its course or would you prefer to decide in advance when to have them?" The response alternatives were "prefer to let nature take its course," "prefer to plan when to have the first child at least," and "prefer to plan when to have all my children." The second item read "Suppose you and your husband did not want to have children or did not want to have a child right now. In terms of the chances of getting pregnant, how "safe" would you want to feel?"; with the response alternatives being "100 percent safe, or as close to that as possible," "Fairly sure I wouldn't get pregnant, say, better than 60 percent safe," and "I don't feel very strongly about it, I'd take even chances." The third item read "How much have you ever actually risked getting pregnant when you didn't want to?"; with the response alternatives being "I have never taken any chances," "I took a chance once"; "I have taken a few chances," and "I have often felt that way." Unfortunately, as shown in Table II-19, the three items did not intercorrelate very well, and therefore cannot be combined into a single index of fertility risk-taking. Nor did any of the three correlate with the woman's first birth interval (number of months between marriage and birth of first child). Therefore, the response distributions of each of the items by criterion group is shown in Table II-20. None of the chi-squares are significant, showing that the groups do not differ in level of fertility risk-taking. The third question--which is the most direct and refers to actual rather than hypothetical behavior--elicits the greatest frequency of reported risk-taking. Role-Innovators show the greatest discrepancy between items: they are almost unanimous in saying they prefer "planning" to leaving things to "nature", yet are the most likely to say they have actually risked unwanted pregnancy. Unless we assume that for some reason Role-Innovators are simply more knowledgeable or more candid about the risks they have taken than the other women, this discrepancy appears rather anomalous. Traditional women show the

Table II-18. Motive To Avoid Success By Man's Attitude Toward
Wife Having A Career (1970)

	<u>Motive To Avoid Success</u>			<u>No Data</u>
	<u>None</u>	<u>Some</u>	<u>High</u>	
	<u>N</u>	<u>N</u>	<u>N</u>	
<u>Attached Women</u>	<u>%</u>	<u>%</u>	<u>%</u>	
<u>Man's Attitude</u>				
Favorable	12 44.5	7 22.6	15 53.5	17
Neutral	6 22.2	11 35.5	6 21.4	18
Unfavorable	3 11.1	8 25.7	3 10.7	3
<u>Unattached Women</u>	6 <u>22.2</u>	5 <u>16.2</u>	4 <u>14.4</u>	18
Total	27	31	28	
Percent	100.0	100.0	100.0	

Table II-19. Intercorrelations Of The Three Fertility Risk-Taking Items And First Birth Interval

	Prefer To Let Nature Take Its <u>Course</u>	I'd Take Even <u>Chances</u>	I Have Often Felt I Was Risking An <u>Unwanted Pregnancy</u>
I'd Take Even Chances	.18		
I Have Often Felt I Was Risking An Unwanted Pregnancy	.07	.15	
First Birth Interval	-.05	-.03	.02

Table II-20. Three Fertility Risk-Taking Items, By 1967 Group

	1967 Group						Total
	Innovator		Moderate		Traditional		N
	N	%	N	%	N	%	
<u>Prefer Nature Or Planning?</u>							
High Risk	2	4.1	7	15.9	12	22.6	21
Low Risk	<u>47</u>	<u>95.9</u>	<u>37</u>	<u>84.1</u>	<u>41</u>	<u>77.4</u>	<u>125</u>
	49	100.0	44	100.0	53	100.0	146
<u>How "Safe" Do You Want To Feel?</u>							
High Risk	5	10.2	4	8.7	10	18.5	19
Low Risk	<u>44</u>	<u>89.8</u>	<u>42</u>	<u>91.3</u>	<u>44</u>	<u>81.5</u>	<u>130</u>
	49	100.0	46	100.0	54	100.0	149
<u>Ever Risked Unwanted Pregnancy?</u>							
High Risk	26	53.1	21	46.7	23	43.4	70
Low Risk	<u>23</u>	<u>46.9</u>	<u>24</u>	<u>53.3</u>	<u>30</u>	<u>56.6</u>	<u>77</u>
	49	100.0	45	100.0	53	100.0	147

least discrepancy in level of risk-taking between items, and also report the least risk-taking on the last--most direct--item.

Descriptions of Self and the Career Woman Stereotype. In the initial study respondents were asked to describe themselves by checking off positions between a series of bipolar scales. There were twenty-eight scales, including Solitary-Social, Free-Constrained, Masculine-Feminine, Happy-Unhappy, etc. Several weeks later they were given the same series of bipolar scales and asked to describe "what you think a woman would be like who was strongly committed to a career which relatively few women enter, that is, something like a surgeon, politician, lawyer, or news reporter. This kind of woman would pursue such a career whether or not she got married and even after having children." In the initial data, on the original sample of 200 women, a measure of central tendency on the Career Woman Stereotype scales yielded a description tending toward the following characteristics: free, hard, deliberate, strong, happy, relies on own opinions, unconventional, clever, active, confident, competent, serious, successful, others depend on her, intellectual, and practical. In all, a rather positive stereotype. As compared to Traditionals, Role-Innovators' self descriptions also tended to be more "unconventional", "rely on own opinions", "others depend on me", and "intellectual" but also less "successful".

Using a more stringent criterion for defining the stereotype of the career woman, we find that the following items received 75 percent or better agreement among the respondents in attributing the characteristic to the Career Woman: agnostic, hard, deliberate, politically liberal, strong, relies on own opinion, unconventional, clever, active, tense, confident, competent, serious, successful, others depend on her, cold, intellectual, and practical. Each respondent was then assigned a score representing the degree to which her own description of herself coincided with the group's stereotype of the Career Woman. The difference between Innovators and Traditionals in their mean Stereotype score was not significant (see Table II-21).

Separate factor analyses were also performed on the two sets of semantic differentials, and the results are presented in Table II-22. In the self-descriptions, the first factor that emerges is a strongly sex-typed cluster: the traits weighted most heavily in this factor are "masculine", "insensitive", "cold", "unhappy", "interested in self", "closed", and "inartistic". (Most respondents described themselves as the opposite of these traits.) The second factor seems to relate to self-reliance or dependency: "strong", "others depend on me", "intellectual", "serious", and "deliberate". The third factor suggests an

Table II-21. Career Woman Stereotype Score, By 1967 Group, By 1970 Group, And By Future Group

<u>Career Woman Stereotype Score</u>		<u>Innovator</u>	<u>Moderate</u>	<u>Traditional</u>	<u>Total</u>
1967 Group	$\bar{x}$	11.200	9.896	12.037	11.086
	S.D.	4.571	4.440	4.143	4.441
	N	50	48	54	152
1970 Group	$\bar{x}$	9.800	11.200	11.756	11.086
	S.D.	4.546	4.601	4.230	4.441
	N	45	25	82	152
		$t_{1,3}=2.4118$		$p .01$	
Future Group	$\bar{x}$	10.212	11.179	11.773	11.086
	S.D.	4.771	4.930	3.999	4.441
	N	52	28	66	152
		$t_{1,3}=1.9183$		$p < .05$	

Table II-22. Factor Analysis Of Semantic Differential Descriptions
Of Self And Of "Career Woman"

Adjective	Factor 1		Factor 2		Factor 3	
	Self	C.W.	Self	C.W.	Self	C.W.
Solitary	.13131	.42129	.04858	-.11034	.04681	-.16647
Constrained	.13021	.46591	.01818	.08530	-.14396	.29874
Masculine	.76436	.66901	.07919	.06489	-.04385	-.19444
Plain	.24494	.51834	.20585	.17327	-.18436	.04587
Rigid	.43063	.70334	.32829	-.10303	-.08573	.13394
Agnostic*	.13456	-.00345	-.01971	-.27721	.71102	-.54279
Hard*	.47527	.55967	.40394	-.34851	.06354	-.26305
Deliberate*	.22839	.49707	.56484	-.38822	-.15296	.31531
Interested in Self	.56358	.51481	-.12533	-.00259	-.00307	-.37186
Politically Liberal*	.36149	-.40776	.01542	-.16892	.56142	-.38119
Strong*	-.07576	-.02447	.67082	-.66953	.12830	.03925
Closed	.54654	.63914	-.13298	.17128	-.10669	.00236
Insensitive	.76181	.67397	-.00428	.09426	-.17053	-.02399
Unhappy	.66377	.66815	-.01109	.00261	.19266	-.38700
Rely On Own Opinion*	.02103	.09007	.45777	-.61054	.05700	-.12885
Unconventional*	-.09117	-.17795	.20071	-.32183	.69879	-.55744
Inartistic	.54617	.58894	.30400	.00451	-.34005	.28398
Clever*	-.22498	-.53525	-.02362	-.38013	.63977	-.41218
Active*	.34262	-.12256	-.00319	-.34296	.53201	-.44333
Tense*	.41896	.62875	.15092	-.07858	.03251	-.20440
Confident*	-.13457	-.38599	.09230	-.22095	.07358	.08717
Competent*	-.19565	-.21079	.36571	-.63909	.16410	.25431
Serious*	.20752	.51980	.57208	-.37329	-.06805	.05869
Successful*	-.02335	-.00005	.28940	-.48266	-.15959	.36032
Others Depend On Me/Her*	.06640	.21024	.65980	-.58644	.07124	.14544
Cold*	.69122	.78761	.08614	-.04644	-.01643	-.22061
Intellectual*	-.14837	-.10685	.61439	-.57678	.02774	.37891
Practical*	-.25033	.21623	.17463	-.25159	-.13508	.37468

* Items on which there was 75% agreement or better as attributed to "Career Woman", and which therefore were used in calculating each Subject's C.W. Stereotype Score.

Self Factor 4: Unhappy, Tense, Not Too Confident, Serious, A Dreamer
C.W. Factor 4: Sensitive, Quiet, A Dreamer

Self Factor 5: Plain, Not Too Competent, Not Too Successful
C.W. Factor 5: Confident, Plain, Not Too Successful

autonomous belief system or life-style: "agnostic", "unconventional", "clever", "politically liberal", and "active".

The first factor on the Career Woman Stereotype includes all the items that appear for the first factor of the self-description plus the following: "plain", "rigid", "hard", "not clever", "tense", and "serious". The second factor can also be characterized as relating to self-reliance, and the third--rather weaker--factor also relates to autonomous beliefs/life-style.

The prominence of a sex-typed standard for self-evaluation is notable. However, the stereotype of the career woman, contrary to expectations, is not just a negative rating on the sex-typed standard; it is generally positive, rather "heavy", and similar in many respects to the self-descriptions. This finding is similar to Rossi's that most women can admire a "pioneer" without aspiring to be one.

College Experience: Role of Faculty

From analyses of the data in the initial study, it appeared that faculty at the University played a somewhat positive but not very strong role in encouraging or raising the aspirations of the women in this study. However, those data were sparse and the present study sought to amplify our understanding of the role that faculty played. It also appeared that male members of the junior instructional staff (teaching fellows, lab instructors) may be more influential in this regard if the students' relationships with them are of a social (or romantic) nature as well as academic. In addition, some attempt was made to assess the extent to which these women perceived themselves as having received differential treatment during college because of their sex. The latter issues will be examined first. It should be born in mind that the Innovators, because more of them are in "masculine" subjects (like math and economics) will have had fewer women instructors than the Traditionals.

The first item in this series deals with the perception that they have been subject to lower expectations because of being women, and the responses have been analyzed according to the sex of the person or persons having such expectations, by their academic position (or positions), and by their academic field (or fields). The data are in Table II-23a-c. Almost three fourths of these women do not recall experiencing such lowered expectations on the part of faculty. Of those who do, nearly all name a male faculty member. The experience is more common among Innovators and Moderates than among Traditionals. For these two groups, Counselors and then Professors are most culpable, but about one-fourth of those so involved also name junior instructors. The

Table II-23. Perception Of Diminished Demands Made On Oneself Because Of Being A Woman, By 1967 Group, A) By Sex Of Person, B) By Academic Position, And C) By Academic Field¹

	Innovator		Moderate		Traditional		Total	
	N	%	N	%	N	%	N	%
<u>A. By Sex Of Person(s)</u>								
Male	12	24.5	14	29.8	10	18.9	36	24.2
Female	0	0.0	1	2.1	0	0.0	1	0.7
Male, Female	1	2.0	1	2.1	0	0.0	2	1.3
Sex Undetermined, Or Person Responds								
"No" To Question	<u>36</u>	<u>73.5</u>	<u>31</u>	<u>66.0</u>	<u>43</u>	<u>81.1</u>	<u>110</u>	<u>73.8</u>
	49	100.0	47	100.0	53	100.0	149	100.0
<u>B. By Academic Position(s)</u>								
Professor	8	38.1	7	31.8	4	36.4	19	
Counselors	8	38.1	9	40.9	2	18.2	19	
Jr. Instructor	<u>5</u>	<u>23.8</u>	<u>6</u>	<u>27.3</u>	<u>5</u>	<u>45.4</u>	<u>16</u>	
Total Nbr. Mentions	21	100.0	22	100.0	11	100.0	54	
<u>C. By Academic Field(s)</u>								
Math, Science	(7)		(9)		(6)		22	55.0
Math	1	7.1	1	6.3	1	10.0	3	7.5
Science, Gen.	0	0.0	1	6.3	0	0.0	1	2.5
Chemistry	3	21.4	3	18.8	3	30.0	9	22.5
Geology	0	0.0	1	6.3	0	0.0	1	2.5
Phys., Biophys.	1	7.1	1	6.3	0	0.0	2	5.0
Bio., Microbio.	0	0.0	1	6.3	1	10.0	2	5.0
Botany	2	14.3	1	6.3	0	0.0	3	7.5
Zoology	0	0.0	0	0.0	1	10.0	1	2.5
Social Science	(3)		(2)		(1)		6	15.0
Economics	1	7.1	0	0.0	0	0.0	1	2.5
Pol. Science	1	7.1	1	6.3	0	0.0	2	5.0
Psychology	1	7.1	1	6.3	1	10.0	3	7.5
History	0	0.0	2	12.5	0	0.0	2	5.0
English	1	7.1	2	12.5	0	0.0	3	7.5
Journalism	0	0.0	1	6.3	0	0.0	1	2.5
Business Admin.	1	7.1	0	0.0	0	0.0	1	2.5
Education	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0.0</u>	<u>1</u>	<u>10.0</u>	<u>1</u>	<u>2.5</u>
Total Nbr. Mentions	12	100.0	16	100.0	8	100.0	36	

¹ Only in the "A" part of this table are the tabulated replies mutually exclusive. Tables B and C may show more than one response for a given person.

academic fields most guilty of this treatment are math and the sciences, and in particular faculty in Chemistry. More than half of the complaints are lodged in these fields. The social sciences have a considerably better record, registering only six complaints (15 percent of the total), and the humanities and professional fields appear comparatively blameless.

A second question in the same vein, but also taking into account the student's own performance, asked "Did you ever have the feeling that your professors or junior instructors had certain expectations about your academic performance which you either exceeded or failed to meet?" The responses are presented in Table II-24 by criterion group and by academic position (professor or junior instructor). Each respondent checked only one reply for each position. The modal perception of the professors, characterizing one fourth of the respondents, is that they didn't have any expectations regarding individual students' performances. This may be one of the hallmarks of the Multiversity. The next most frequent perception of professors was that "they were just satisfied with my performance" (about a fifth of the women). Disparities between Professors' expectations and performance in either direction, are comparatively rare (seven percent exceeding expectations, ten percent falling short of expectations).

Some differences between the groups of respondents are worth noting. Innovators are most likely to feel their performance exceeded the expectations of both professors and instructors. Yet the modal response in this group is that they do not know what either professors (27 percent) or instructors (31 percent) expected of them, and these figures are higher than for either of the other groups. They are least likely to feel that professors and instructors were "just satisfied" with their performance. The biggest difference in their perceptions of professors and of instructors expectations is that they are more likely to impute lack of expectations to professors than to instructors. Lest this be interpreted as greater familiarity with instructors, we may note again that the modal response to instructors is ignorance of their expectations. Neither of these items, then, reveal any particular affinity for or intimacy with junior instructors relative to professors.

In a more positive vein, the next series of questions asks about persons who were particularly encouraging to the respondent, who had a special influence on them, what the nature of that influence was, and under what circumstances they had contact with such persons. Most of the women in each group did not receive any particular encouragement from any of the faculty at the University.

Table II-24. Perceived Expectations Of Instructors Relative To Own Performance, By 1967 Group

	Innovator		Moderate		Traditional		All Groups	
	Prof.	Jr. Instr.	Prof.	Jr. Instr.	Prof.	Jr. Instr.	Prof.	Jr. Instr.
My Performance Exceeded Their Expectations	N 5 % 10.2	5 10.2	3 6.7	3 6.5	2 3.7	3 5.8	10 6.8	11 7.5
They Were Just Satisfied	N 8 % 16.3	9 18.4	13 28.9	11 23.9	11 20.4	13 25.0	32 21.6	33 22.4
Some Expected More, Some Less	N 6 % 12.2	7 14.3	8 17.8	10 21.7	12 22.2	13 25.0	26 17.6	30 20.4
I Don't Think They Had Any Expectations	N 12 % 24.5	8 16.3	15 33.3	15 32.6	11 20.4	9 17.3	38 25.7	32 21.8
My Performance Fell Short of Their Expectations	N 5 % 10.2	5 10.2	3 6.7	3 6.5	6 11.1	4 7.7	14 9.5	12 8.2
I Don't Know What They Expected	N 13 % 26.5	15 30.6	3 6.7	4 8.7	12 22.2	10 19.2	28 18.9	29 19.7
Total	49 100.0	49 100.0	45 100.0	46 100.0	54 100.0	52 100.0	148 100.0	147 100.0
Percent	(33.1)	(33.3)	(30.4)	(31.3)	(36.5)	(35.4)	(100.0)	(100.0)

See Table II-25a. Of those who did, far the greatest number of mentions were of men. Given the sex-ratio in the faculty, this is understandable. Traditionals are much more likely to mention receiving encouragement from women or from women and men than are Innovators. Moderates' reports are intermediate between these two. Innovators, on the other hand, mention more men as having encouraged them than do Traditionals. In terms of the academic positions of the persons who encouraged them (Table II-25b), the rank order of frequency of mentions puts professors first and then junior instructors in all three groups. Although laboratory instructors rank next for Innovators, they are outranked by Critic Teachers for both Moderates and Traditionals. Least frequently mentioned are Clinical Instructors, and these primarily by Traditionals. If we look at the proportion of women included in the number of mentions by academic position, the ratios reflect precisely where in the University faculty women are to be found: they are heavily represented in the Moderates' and Traditionals' mentions of Critic Teachers and Clinical Instructors, and in the Innovators' mentions of Laboratory Instructors. Women constitute 39 percent of the Traditionals' mentions of professorial encouragers, but less than ten percent of the Innovators' or Moderates'. In the latter two groups, women are more likely to be mentioned as Junior Instructors who encouraged them.

A very similar pattern with respect both to sex and academic position appears in Table II-26a-b which shows responses to the question "Did any faculty have a special influence on you?" The representation of women faculty in this table is even smaller than in the previous one. These data are not necessarily in conflict with the data in Table II-3, but do suggest that women do find female role-models inspirational figures outside of the University.

Although greater contact with faculty is generally assumed to increase the value that students get from the teacher-student relationship, previous data did not show this to be the case for contacts with professors. The pattern of contact with junior instructors, however, seemed to indicate that a somewhat steady (perhaps romantic) relationship was facilitative of Innovative aspirations. To pursue this possibility further, respondents were asked about their non-classroom contacts with the person who particularly encouraged them. The data are in Table II-27. Only six women report dating such a person, but twenty-four "influencers" attended the same parties as the respondent and eighteen influencers were at the same non-academic functions of a university organization as the respondent. Seven influencers became personal friends of the respondent. However, the typical response to this question is that there was no contact with the person in other than class-related contexts and it is even more true with respect

Table II-25. Encouragement Received From Faculty, By 1967 Group, A) By Sex Of Person,
And B) By Academic Position

	Innovator		Moderate		Traditional		Total	
	N	%	N	%	N	%	N	%
A. By Sex Of Person								
Only From Males	62	76.5	58	73.4	49	55.1	169	
Only From Females	6	7.5	13	16.5	26	29.2	45	
From Both	13	16.0	8	10.1	14	15.7	35	
Total Nbr. Mentions	81	100.0	79	100.0	89	100.0	249	
	Innovator		Moderate		Traditional		Total	
	N	%	N	%	N	%	N	%
B. By Academic Position								
Professor	38	9.5	32	9.4	31	38.8	101	
Jr. Instructor	28	28.6	25	32.0	20	25.0	73	
Lab. Instructor	12	50.0	8	12.5	12	8.3	32	
Clinical Instructor	2	50.0	1	0.0	9	100.0	12	
Critic Teacher	1	0.0	13	70.0	17	76.5	31	
Total Nbr. Mentions	81	42.5	79	26.6	89	45.5	249	

* Proportion of each category of mentions which refers to female encouragers.
 ** Number in parenthesis is number of females mentioned.

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Table II-26. Faculty Who Had A Special Influence, By 1967 Group, A) By Sex Of Person,
And B) By Academic Position

A. By Sex Of Person		Innovator		Moderate		Traditional		Total	
		N	%	N	%	N	%	N	
Only From Males	47	18.9		49	20.5	26	9.9		122
Only From Females	9	3.6		10	4.2	18	6.8		37
From Both	2	.8		0	0.0	3	1.1		5
From Neither	191	76.7		180	75.3	216	82.2		587
Total Nbr. Mentions	249	100.0		239	100.0	263	100.0		751

B. By Academic Position		Innovator		Moderate		Traditional		Total	
		N	%	N	%	N	%	N	
Professor	30	6.7	(2)	33	3.0	(1)	26	28.9	(7)
Jr. Instructor	20	25.0	(5)	16	12.5	(2)	5	20.0	(1)
Lab. Instructor	5	20.0	(1)	0	0.0	(0)	1	0.0	(0)
Clinical Instructor	2	100.0	(2)	2	50.0	(1)	6	100.0	(6)
Critic Teacher	1	100.0	(1)	8	75.0	(6)	9	77.8	(7)
Total Nbr. Mentions	58	19.0	(11)	59	17.0	(10)	47	44.8	(21)
								18	164

* Proportion of each category of mentions which refers to female encouragers.
 ** Number in parenthesis is number of females mentioned.

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to the women than the men. The women influencers were much less likely to have purely social contacts with the respondents than the men influencers, and also less likely to become personal friends. These results do suggest that to some extent the heterosexual relationship did provide more opportunities for a broader range and greater frequency of contact.

When the question of influence is further narrowed to the one person who had the most significant influence on the respondent, the pattern with respect to sex and academic position remains the same. These data are in Table II-28. Male professors rank first, then male junior instructors, then female critic teachers, female professors and clinical instructors, then female junior instructors and male critic teachers. Innovators mention only professors and junior instructors, who are overwhelmingly male; Traditionals mention persons in all ranks, and more women including professors.

In stating the nature of the influence of the most significant person, Innovators were most likely to say that they aroused or increased their interest in a subject which became their major concern, thus referring to an intellectual influence primarily. Their next most typical responses were that the person gave them confidence in their own academic ability, or raised their level of aspiration, thus referring to strongly motivational influence. But both of these latter two responses were more typical of the Moderates and Traditionals. These data are in Table II-29. The presence of more women in the faculties now dominated by men would surely provide more of the motivational inspiration women need to transcend the sex-barriers in the educational as well as occupational world.

Table II-28. Person Whose Influence Was Most Significant, By 1967
Group, Sex Of Influencer, And Academic Position

Sex And Academic Position	1967 Group							
	Innovator		Moderate		Traditional		Total	
	N	%	N	%	N	%	N	%
<u>Professor</u>								
Male	22	61.1	24	61.5	17	45.9	63	56.3
Female	2	5.6	0	0.0	4	10.8	6	5.4
<u>Jr. Instructor</u>								
Male	10	27.8	9	23.1	2	5.4	21	18.8
Female	2	5.6	1	2.6	1	2.7	4	3.6
<u>Clinical Instr.</u>								
Female	0	0.0	1	2.6	5	13.5	6	5.4
<u>Critic Teacher</u>								
Male	0	0.0	2	5.1	2	5.4	4	3.6
Female	0	0.0	2	5.1	6	16.2	8	7.1
Total	36	100.0	39	100.0	37	100.0	112	100.0
Percent	32.1		34.8		33.0			

$$\chi^2=27.29137 \quad df=12 \quad p<.01$$

Table II-29. Nature Of Influence By Faculty Person Whose Influence
Was Most Significant, By 1967 Group

Nature Of Influence	Innovator		1967 Group				Total	
	N	%	N	%	N	%	N	%
Aroused Or Increased My Interest In A Subject Which Became My Major Concern; Opened My Eyes To Social Problems	14	37.8	6	15.0	4	10.8	24	21.1
Gave Me A New Way Of Looking At Certain Academic Subjects; Taught Me To Think In An Adult Framework	0	0.0	2	5.0	2	5.4	4	3.5
Gave Me Certain Valuable Skills For Dealing With My Subject Matter	1	2.7	1	2.5	2	5.4	4	3.5
Gave Me Confidence In My Academic Ability	9	24.3	12	30.0	14	37.8	35	30.7
Introduced Me To Ways I Could Combine Diff. Interests Or Pursue An Interest I Thought Was Impractical	2	5.4	1	2.5	0	0.0	3	2.6
Raised My Level Of Aspiration	8	21.6	13	32.5	10	27.0	31	27.2
Inspired Me To Work Up To My Fullest Cap.	3	8.1	2	5.0	3	8.1	8	7.0
Inspiration By Own Lifestyle; Opened My Mind, Made Me Start Questioning	0	0.0	2	5.0	0	0.0	2	1.8
Negative Influence	0	0.0	1	2.5	2	5.4	3	2.6
Total	37	100.0	40	100.0	37	100.0	114	100.0
Percent	32.5		35.1		32.5		100.0	

CHAPTER III

Post-Graduation Experience

This chapter reports the experiences of these women in the first three years following their graduation from college. The four major areas to be examined are post-graduation studies, work, marriage, and family formation. We begin with a general description of their present activities.

The first question Interviewees were asked and the second question on the Questionnaire (after an identification question), was "What is your present major activity? That is, what takes most of your time right now, or what are you doing that is most important to you?" The response to this question is referred to as Present (Major) Activity, and was analyzed in several ways: whether she was working, studying, or full-time housewife; by content of field employed in or studying; and by sex-ratio (1970 Role-Innovation Score). These data are presented in Tables III-1 through 4.

Half of the women are working full-time, slightly over one fifth are full-time housewives, one sixth are studying full-time, less than one tenth are working part-time, and five are engaged in other activities (such as meditation, travelling, "nothing", etc.). A larger proportion of the Innovators are studying full-time (three times as many Traditionals) and Traditionals are more likely than Innovators to be working full-time. One fourth of the Moderates and one fifth of the Innovators and Traditionals are now mothers and full-time housewives. Most of the women who were studying part-time were also working full-time and were classified that way. Only mothers with very young children were staying home, and these account for all the housewives.

Of the non-housewives, most of the women are working or studying in the humanities, librarianship, and the social sciences, in that order. Life sciences (including the health professions), and education (and education administration) come in third in frequency, followed by law-business-government, then math, and then physical science (the latter accounting for only one respondent). This distribution is fairly similar to the distribution of faculties' low expectations for performance by academic field (in Table II-23), thus providing evidence for either remarkable foresight on the part of faculty, or for a familiar circle of causality known as the self-fulfilling prophecy.

Table III-1. Present Major Activity By 1967 Group

	Innovator		Moderate		1967 Group Traditional		Total	
					N	%		
Working Full-time	22	44.0	22	46.0	32	59.2	76	50.0
Working Part-time	3	6.0	5	10.4	5	9.3	13	8.5
Studying Full-time	14	28.0	7	14.5	4	7.4	25	16.5
Housewife	9	18.0	13	27.0	11	20.4	33	21.7
Other	2	4.0	1	2.1	2	3.7	5	3.3
	50	100.0	48	100.0	54	100.0	152	100.0

 $x^2=12.30826$ df=10 n.s.
Table III-2. Field Of Present Major Activity, By 1967 Group

	Innovator		Moderate		1967 Group Traditional		Total	
					N	%		
Housewife	10	10.0	12	25.0	11	20.0	33	21.6
Educ. & Ed. Admin.	1		4		13		18	11.8
Humanities, Librarian	3		14		14		31	21.0
Life Science & Health Professions	9		1		9		19	12.4
Social Science	11		10		6		27	17.7
Law, Business, Government	8		4		1		13	8.5
Math	5		2		0		7	4.6
Physical Science	1		0		0		1	0.6
Nothing	2		1		0		3	1.8
Total	50		48		54		152	100.0

 $x^2=43.59135$ p<.001 df=16

Table III-3. 1967 Group, By 1970 Group

		1970 Group						
		Innovator		Moderate		Traditional		Total
1967 Group		N	%	N	%	N	%	
Innovator	N	29	64.4	6	24.0	15	18.3	50
	%	58.0		12.0		30.0		100.0
Moderate	N	12	26.7	11	44.0	25	30.5	48
	%	25.0		22.9		52.1		100.0
Traditional	N	4	8.9	8	32.0	42	51.2	54
	%	7.4		14.8		77.8		100.0
Total	N	45	100.0	25	100.0	82	100.0	152

$$\chi^2 = 35.88899 \quad df = 4 \quad p \leq .001$$

Table III-4. Selected Characteristics Of Respondents Present Situation

<u>Selected Characteristics</u>	<u>Innovator</u>		<u>Moderate</u>		<u>Traditional</u>		<u>Total</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
<u>Marital Status</u>								
Married	28	56	30	63	35	65	93	61
Not Married, Engaged, Or Going Steady	13	26	8	17	12	22	33	22
<u>Mothers/Housewives</u>	10	20	12	25	11	20	33	22
<u>Employed Now</u>	32	64	36	75	45	83	113	74
<u>Avg. Nbr. Jobs Held Since Graduation</u>	3.46		3.34		3.83		3.54	
<u>Taking Courses Now</u>	17	34	12	25	12	22	41	27
<u>Avg. Birth Interval In Months (Excluding Interrupted Preg- nancies)</u>								
	22.90 mos.		22.08 mos.		21.81 mos.			

When the 1970 Role-Innovation Score is grouped into the same three intervals as for the initial Role-Innovation measure, and the two distributions plotted against each other, we find the association between the two scores highly significant, although there is also a general trend toward more Traditional activity. The greatest shift occurs in the Moderate group, more than half of whom are now Traditionals, and one quarter of whom are now engaged in Innovative activity. The least shifting has taken place among the Traditionals, 78 percent of whom remain in their original classification (which includes housewives). Two thirds of the remaining Traditionals are now Moderates, (engaged in activity where 31 to 49 percent of the persons are women), and the rest are now engaged in Innovative activity. Among the Innovators, the greatest slippage is into the Traditional category, accounting for 30 percent of the original group. Two thirds of these persons are now housewife-mothers. Only twelve percent (six persons) are now Moderates. The bulk of the Innovators, however, remain Innovators, accounting for 58 percent of this group.

A majority of each group (about 60 percent) are now married, and only one fifth to one fourth of each group are not attached at all (that is, neither married, engaged, nor going steady). Sixty-four percent of the Innovators and eighty-three percent of the Traditionals are employed, the average number of jobs held since graduation is 3.5. Twenty-seven percent of the women are taking courses now, most of the Innovators going full-time, whereas most of the Traditionals are not. Each of the mothers have had only one child so far, with only three women beginning their second pregnancy. The interval between marriage and the first birth (First Birth Interval) was not significantly different between the groups (though Innovators waited slightly longer), the average being about twenty-two months.

Post-B.A. Education

The educational accomplishments of the women beyond the B.A. degree are shown in Tables III-5 and III-6. Two Innovators have completed a Ph.D. and a law degree, eleven more have completed Master's degrees. One Traditional has completed the D.Ed. degree, sixteen have completed Master's degrees, and three have completed teaching certificates. Twenty-one of the Moderates have completed Master's degrees, and one a teaching certificate. Many more degrees, however, are in progress in each group. Most of the people working on doctorates, either in liberal arts or education, are Innovators, and so are all of the women who are working toward the M.D., D.D.S., or J.D. (Doctorate of Jurisprudence, formerly identified as the LLB degree). Most of the Master's degrees in

Table III-5. Degrees Completed By 1967 Group

	<u>Innovator</u>	<u>Moderate</u>	<u>Traditional</u>
PhD, D.Lit.	1	0	0
LLB, J.D.	1	0	0
D.Ed.	0	0	1
MA, MS, MBA, MAT	11	21	16
Teaching Certif.	<u>0</u>	<u>1</u>	<u>3</u>
Total	13	22	20

Table III-6. Studies In Progress, By 1967 Group

	<u>Innovator</u>	<u>Moderate</u>	<u>Traditional</u>
PhD, D.Lit.	12	6	2
MD, DDS	4	0	0
LLB, J.D.	2	0	0
D.Ed.	5	1	0
MA, MS, MBA, MAT	5	14	17
Taking Courses But Not Interested In Degree	7	12	9
Not Presently Engaged In Any Studies	15	14	14
Teaching Certif.	<u>0</u>	<u>1</u>	<u>2</u>
Total	50	48	54

progress, on the other hand, are among the Moderates and Traditionals, and so are all (three) of the teaching certificates. In addition, a number of people in each group are taking courses without working toward a degree of any kind. Most of these are Moderates. Some of the women working on degrees are not presently enrolled for courses. Only twenty-eight percent of the sample are not presently engaged in studies of any kind.

The women were also asked to list all the post-B.A. studies they had done, whether completed or not, and this information appears in Tables III-7 and 7a, classified according to whether these were in graduate school, professional school, business school, or other. As in our previous findings with respect to diversity of fields, these data indicate a greater diversity of post-B.A. educational experience among Innovators. The preponderance of their experience, however, has been in graduate school, whereas for Traditionals most of it has been in other institutions.

Using the sex-ratio measure of the kinds of studies the women have done, we find a strong relationship between their most recent studies and the kinds of graduate work they said they wanted to do in 1967 ($r=.62$, $p<.001$). Of the twenty women who have been in more than one Graduate Field, three initially went into more Innovative Fields than they planned to in 1967, 15 initially went into more Traditional Fields, and for two women there was no difference. The data in Table III-8 are arranged by criterion group (1967) and the grouped sex-ratio scores for the graduate field in which they did their most recent work. As a check on the correspondence between the sex-ratio figures for the graduate field which were derived from national statistics and the women's own experience of the proportion women in her classes, we asked her to estimate this figure for the most recent classes she took. The Pearson correlation between the two figures is .63, indicating that the national statistics we were using were a fairly good estimate of the Innovativeness of the woman's own experience. The national statistics were preferred to the women's personal estimates because of their greater reliability over time and across subjects. The same comparison was made for work experience. The women's estimates are presented by group in Tables III-9 and 9a.

Further comparisons of the sex-ratio index for all the education and occupation variables are presented in Table III-10 which presents them in correlation form, and Table III-11 which presents them in terms of average scores for each of the groups. The following variables are included. "Occupation 1" was the occupation given by the woman in 1967 as the one she was most likely to go into and is the one used to classify her as Innovator, Moderate or Traditional. "Occupation 2" was the one she was next

Table III-7. Nature Of Further Studies Since 1967, By 1967 Group

	1967 Group						Total N
	Innovator		Moderate		Traditional		
	N	%	N	%	N	%	
Graduate School	14	41.2	20	48.8	10	25.6	44
Graduate And Professional School	3	8.8	1	2.4	2	5.1	6
Graduate And Other	3	8.8	0	0.0	0	0.0	3
Professional School	8	23.5	12	29.3	22	56.4	42
Professional And Business School	0	0.0	0	0.0	1	2.6	1
Professional And Other	0	0.0	2	4.9	1	2.6	3
Business School	2	5.9	0	0.0	0	0.0	2
Other	4	11.8	6	14.6	3	7.7	13
Total	34	100.0	41	100.0	39	100.0	114
x ² =26.84471 df=14 p<.025							

Table III-7a. Graduate School Versus All Other Further Studies,
By 1967 Group

	1967 Group						Total
	Innovator		Moderate		Traditional		
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	
Graduate School	20	58.8	21	51.2	12	30.8	53
All Other	<u>14</u>		<u>20</u>		<u>27</u>		<u>61</u>
Total	34		41		39		114

Table III-8. Percent Women In One's Last Graduate Field, By 1967 Group

		Percent Women In Last Graduate Field								
		<u>0-9%</u>	<u>10-19</u>	<u>20-29</u>	<u>30-39</u>	<u>40-49</u>	<u>50-59</u>	<u>60-69</u>	<u>70-98</u>	<u>Total</u>
Innovator	14	7	5	2	1	2	2	2	0	33
Row %	42.4	21.2	15.2	6.1	3.0	6.1	6.1	6.1	0.0	29.7
Moderate	1	2	11	6	4	4	10	10	1	39
Row %	2.6	5.1	28.2	15.4	10.3	10.3	25.6	25.6	2.6	35.1
Traditional	0	0	4	8	12	3	6	6	6	39
Row %	0.0	0.0	10.3	20.5	30.8	7.7	15.4	15.4	15.4	35.1
Total	15	9	20	16	17	9	18	18	7	111
	13.5	8.1	18.0	14.4	15.3	8.1	16.2	16.2	6.3	100.0

$\chi^2=68.73103$ $df=14$ $p<.001$

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Table III-9. Percent Women In One's Classes, By 1967 Group

Percent Women In One's Classes	1967 Group			Total
	<u>Innovator</u>	<u>Moderate</u>	<u>Traditional</u>	
<5%	10	0	0	10
6-15%	5	3	0	8
16-30%	8	3	2	13
31-40%	5	8	1	14
About 50%	2	6	11	19
> 50%	<u>4</u>	<u>19</u>	<u>24</u>	<u>47</u>
Total	34	39	38	111

$$x^2=56.49536 \quad df=10 \quad p<.001$$

Table III-9a. Table III- 9 Dichotomized Into More Or Less Than Half

Percent Women In One's Classes	1967 Group			Total
	<u>Innovator</u>	<u>Moderate</u>	<u>Traditional</u>	
Less Than 50%	28	14	3	45
50% Or More	<u>6</u>	<u>25</u>	<u>35</u>	<u>66</u>
Total	34	39	38	111

$$x^2=41.798 \quad df=2 \quad p<.001$$

Table III-10. Correlation Matrix of All Occupation And Education Indices
Of Role-Innovation (Pearson R)

Variable	5	7	13	23	25	100	104	109	121	144	149	154	182	188
5 Occup. 1 1967														
7 Occup. 2 1967 (W)	.4383 (71)***													
13 Pfd. Occ. 1967	.3380 (140)*	.4170 (16)												
23 U-G Major 1967	.4628 (152)***	.2070 (71)*	.1924 (40)											
25 1st GF 1967	.6812 (132)***	.4083 (59)***	.2189 (37)	.5114 (132)***										
100 PMA 1970	.4163 (152)***	.4012 (71)***	.0910 (40)	.1815 (152)*	.3804 (132)***									
104 Last GF 1970	.5185 (111)***	.2439 (50)*	.1949 (32)	.2644 (111)***	.6197 (103)***	.5406 (111)***								
109 Last Job 1970	.5022 (146)***	.4380 (68)***	.1120 (40)	.2838 (146)***	.4217 (126)***	.7546 (146)***	.4632 (105)***							
121 First GF 1970	.1002 (25)	.4089 (15)	-	.0979 (25)	.4403 (21)*	.5410 (25)**	.5636 (25)**	.3558 (25)*						
144 Pfd GF 1970 Students	.4477 (14)	.4752 (7)	-	.3949 (14)	.6186 (13)**	.6574 (14)**	.5350 (14)*	.3194 (12)	.5948 (6)					
149 Pfd GF 1970 Non-Students	.4528 (24)*	.0310 (19)	-.3261 (10)	.3036 (24)	.2622 (23)	.1558 (24)	.0107 (24)	.3499 (23)*	-	-				
154 Future GF 1970 Non-Students	.1506 (65)	.1881 (31)	-.0953 (19)	.3167 (65)**	.3795 (57)**	.1825 (65)	.1510 (41)	.2868 (65)**	.4354 (6)	.7710 (17)***				
182 Previous Occ. Goal 1970	.5159 (55)***	.4522 (21)*	-.0746 (16)	.3965 (55)***	.5174 (47)***	.2156 (55)	.3627 (37)*	.2253 (54)*	.8474 (8)**	.9414 (6)**	.4633 (8)	.2543 (25)		
184 New Occ Goal 1970	.2716 (62)*	.2235 (29)	.0149 (16)	.2115 (62)*	.4346 (54)***	.4919 (62)***	.5085 (42)***	.4762 (61)***	.4431 (15)*	.8236 (8)**	.2741 (8)	.6689 (26)***	.1365 (50)	
194 First Job 1970	.3851 (115)***	.0658 (59)	-.0041 (31)	.2833 (115)***	.3104 (99)***	.3020 (115)***	.3936 (83)***	.4518 (115)***	.0668 (21)	.7365 (9)*	.1735 (17)	.1446 (53)	.3628 (43)**	.2208 (48)

Number of cases shown in parenthesis.
-: less than 5 cases.

* p < .05
** p < .01
*** p < .001

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Table III-11. Average Role-Innovation Scores (Percent Men) Of Several Occupational And Academic Choices

	Innovator $\bar{x}$	Moderate $\bar{x}$	Traditional $\bar{x}$	Total $\bar{x}$
1. Occupation 1, 1967				
$\bar{x}$	84.200	63.625	20.648	55.066
S.D.	7.784	5.599	13.686	28.630
N	50	48	54	152
	$t_{1,2}=14.8288$ $p<.001$	$t_{1,3}=28.5344$ $p<.001$	$t_{2,3}=20.1048$ $p<.001$	
2. Occupation 2, 1967				
$\bar{x}$	93.630	68.000	43.688	64.296
S.D.	17.792	15.214	29.684	23.409
N	7	17	16	71
	$t_{1,3}=4.0996$ $p<.001$	$t_{2,3}=3.5066$ $p<.001$		
3. Preferred Occupation, 1967				
$\bar{x}$	87.571	70.000	52.562	66.100
S.D.	10.612	30.422	30.336	30.258
N	7	17	16	40
	$t_{1,3}=2.8429$ $p<.005$			
4. Undergraduate Major				
$\bar{x}$	51.620	41.271	23.066	38.204
S.D.	26.503	21.299	24.798	27.012
N	50	48	54	152
	$t_{1,2}=2.1057$ $p<.025$	$t_{1,3}=5.6242$ $p<.001$	$t_{2,3}=3.9183$ $p<.001$	

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Table III-11 continued

	Innovator $\bar{x}$	Moderate $\bar{x}$	Traditional $\bar{x}$	Total $\bar{x}$
5. 1st Graduate Field, 1967	$\bar{x}$ S.D. N	$\bar{x}$ S.D. N	$\bar{x}$ S.D. N	$\bar{x}$ S.D. N
	82.488 14.380 43	62.909 16.572 44	44.000 21.619 45	62.841 23.708 132
	$t_{1,2}=5.8187$ $p<.001$	$t_{1,3}=9.6871$ $p<.001$	$t_{2,3}=4.5760$ $p<.001$	
6. Major Present Activity	$\bar{x}$ S.D. N	$\bar{x}$ S.D. N	$\bar{x}$ S.D. N	$\bar{x}$ S.D. N
	61.880 33.223 50	41.937 32.181 48	29.944 24.518 54	44.237 32.700 152
	$t_{1,2}=2.9882$ $p<.005$	$t_{1,3}=5.5528$ $p<.001$	$t_{2,3}=2.1109$ $p<.025$	
7. 1st Graduate Field, 1970	$\bar{x}$ S.D. N	$\bar{x}$ S.D. N	$\bar{x}$ S.D. N	$\bar{x}$ S.D. N
	60.111 21.380 9	48.875 21.357 8	48.235 27.327 8	52.720 23.136 25
8. Preferred Graduate Field (students, 1970)	$\bar{x}$ S.D. N	$\bar{x}$ S.D. N	$\bar{x}$ S.D. N	$\bar{x}$ S.D. N
	86.732 18.300 7	80.500 14.849 2	71.800 14.856 5	80.500 17.010 14
9. Preferred Graduate Field (non-students, 1970)	$\bar{x}$ S.D. N	$\bar{x}$ S.D. N	$\bar{x}$ S.D. N	$\bar{x}$ S.D. N
	60.000 16.971 2	84.300 11.431 10	59.750 27.469 12	70.000 24.020 24
	$t_{2,3}=2.5195$ $p<.025$			

Table III-11 continued

	Innovator	Moderate	Traditional	Total
	$\bar{x}$	$\bar{x}$	$\bar{x}$	$\bar{x}$
10. Last Graduate Field, 1970				
$\bar{x}$	80.848	59.513	50.282	62.613
S.D.	17.861	18.962	17.785	21.986
N	33	39	39	111
	$t_{1,2}=4.8198$	$t_{1,3}=7.1553$	$t_{2,3}=2.1910$	
	$p<.001$	$p<.001$	$p<.025$	
11. Future Graduate Field, (non-students, 1970)				
$\bar{x}$	67.200	66.174	60.818	64.677
S.D.	22.409	14.880	22.285	19.901
N	43	44	45	132
12. First Job, 1970				
$\bar{x}$	50.973	42.211	25.600	39.525
S.D.	29.252	26.665	19.606	27.302
N	37	38	40	115
	$t_{1,3}=4.4387$	$t_{2,3}=3.1065$		
	$p<.001$	$p<.005$		
13. Last Job, 1970				
$\bar{x}$	60.826	50.913	28.259	45.658
S.D.	26.160	26.869	22.122	28.457
N	46	46	54	146
	$t_{1,2}=1.7751$	$t_{1,3}=6.6854$	$t_{2,3}=4.5825$	
	$p<.05$	$p<.001$	$p<.001$	

Table III-11 continued

	Innovator $\bar{x}$	Moderate $\bar{x}$	Traditional $\bar{x}$	Total $\bar{x}$
14. Previous Occupational Goal - 1970 (for those who have changed only)				
$\bar{x}$	76.238	58.000	42.235	60.091
S.D.	19.023	13.360	31.732	26.238
N	21	17	17	55
	$t_{1,2}=3.2541$ $p<.005$	$t_{1,3}=3.9794$ $p<.001$	$t_{2,3}=1.8320$ $p<.05$	
15. New Occupational Goal - 1970 (for those who have changed goals only)				
$\bar{x}$	62.231	55.588	44.316	54.919
S.D.	23.386	27.846	21.975	25.059
N	26	17	19	62
	$t_{1,3}=2.5466$ $p<.01$			

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most likely to go into at that time. "Preferred Occupation 1967" was the occupation named as the one preferred by women who felt that "Occupation 1" was really a compromise with what they would like to do. "Undergraduate Major" was the woman's major during the senior year of college. "First Graduate Field 1967" is the field given by the woman in 1967 as the one she was most likely to go into. "Present Major Activity" has been described. "First Graduate Field 1970" is the area in which the woman did her first graduate work after completing the B.A. "Preferred Graduate Field 1970" was the area named as the one preferred by women who felt that "First Graduate Field 1970" was really a compromise with what they would really like to study; "Last Graduate Field 1970" is the area in which she did her most recent (or continuing) graduate studies. "Future Graduate Field" is the area in which women who are not presently in school would like to study when and if they can do so. "First Job" is the one she took or had immediately after graduating. "Last Job" is her most recent (or present) job. "Previous Occupational Goal" is the one dropped by women who report having changed their goals since leaving college. "New Occupational Goal" is the one to which they now aspire if they changed goals since leaving college.

The strongest relationships are between Previous Occupational Goal 1970, and both Preferred Graduate Field 1970 and First Graduate Field 1970 on the one hand, and between Preferred Graduate Field 1970 and both New Occupational Goal 1970 and First Job 1970, on the other hand. Thus, both prior and present educational and occupational goals are closely related to each other. Furthermore, First Job 1970 may be one of the typical reasons for changing occupational goals. Several women felt they had lucked into jobs which became careers for them. Future Graduate Field 1970, Preferred Graduate Field 1970 and New Occupational Goal 1970 are highly related for women not now in school. Present Major Activity 1970 is most highly correlated with First Graduate Field 1967 which is highly correlated with Last Graduate Field 1970, thus indicating reasonably strong perseverance in Role-Innovation, as does the strong relationship between Preferred Graduate Field 1970 and First Graduate Field 1967. Occupation 1 1967 is most strongly correlated with First Graduate Field 1967 and Last Graduate Field 1970. All these data tend to show reasonable consistency in level of aspiration over time and between educational and occupational goals.

The same inferences can be made from the mean sex-ratio scores of all these variables in Table III-11, where the most dominant feature is that Innovators always have higher mean scores than Traditionals or Moderates. The differences tend to be

greater for the 1967 variables than for the more recent data, and least for the 1970 education variables.

Discrimination

Women in each group have experienced difficulties in planning or pursuing further education because of their sex. Most of these experiences were by Innovators, whereas Traditionals experienced the least difficulties. One sixth of the entire sample reported such experiences and almost one third of the Innovators. These data are in Table III-12. Positive responses to this question correlated .30 with the sex-ratio in the Graduate Field, and .33 with the estimated sex-ratio in the respondents' classes.

The kinds of difficulties encountered include outright discrimination in academic admissions, strong generalized discouragement from faculty, financial aid and job placement discrimination, as well as role conflict (two persons) and difficulties caused by husband's location and career (two persons). A summarized presentation of these data is in Table III-13. Statements classified as "strong general difficulties" referred to several of the following: attitudes of faculty, discouragement on admissions, others' belief that women show less stamina, the experience that women aren't taken seriously, "male classmates in physics were reluctant to accept me as an equal", "I had to assure the school that I would finish, yet was put on the bottom of the list and rejected in spite of my record", "the head of the Department thinks women belong in the home". Statements classified as "mild general difficulties" were stated in a more mild way and referred to one of the following: attitudes of a faculty member, or of "an advisor who warned that it would be difficult to get married in medical school, and wasn't this what I wanted?", etc. Statements about difficulties with admissions included "I was told it would help if I were black and male", and being told that "women would drop out more quickly", that there was a quota system, etc. Statements about role conflict referred to the many aspects of a woman's role (home, social, and financial responsibilities), and that time limits for completion of degrees were harder on women. One person anticipated having difficulties in the future because the Department she wanted admission to had a reputation for being hard on women.

A later question asked the respondent whether she thought that women in general have special difficulties in pursuing further education and if so, to check as many of the fixed alternatives provided as she thought applied. This question, both because of its more generalized referent and its provision of response categories elicited substantially higher levels of reported

Table III-12. Incidence Of Personal Experience With Difficulties
In Pursuing Further Education, By 1967 Group

	1967 Group							
	Innovator		Moderate		Traditional		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Yes	15	60	6	24	4	16	25	100.0
%	(30.0)		(12.5)		(7.4)			
No	<u>35</u>		<u>42</u>		<u>50</u>		<u>127</u>	
	50		48		54		152	
	$\chi^2=10.43831$ df=2 p<.01							

Table III-13. Kinds Of Difficulties Personally Experienced In
Further Education, By 1967 Group

	1967 Group				Total
	Innovator	Moderate	Traditional		
Gen. Difficulties; Strong Statement	3	2	1		6
Gen. Difficulties; Mild Statement	1	2	1		4
Admissions Only	6	1	0		7
Admissions And Financing	1	0	0		1
Fellowships, Job Placements For Summer	2	0	0		2
Conflict With Many Aspects Of Women's Role	1	1	0		2
Husband's Location And Career	0	0	2		2
Expect Difficulties In Future	<u>1</u> 15	<u>0</u> 6	<u>0</u> 4		<u>1</u> 25
As Percentage Of Nbr. In Each Group Who Have Been In (Or Tried) Post- BA Studies	36.6% (of 41)	12.5% (of 48)	8.7% (of 46)		

difficulties than did the questions dealing with personal experience alone. The next question asked whether the respondent herself knew of women who had had such experience, and sixty-nine responded "yes." These data are in Tables III-14 and 15.

An Index of Discrimination Awareness in Education was constructed using the responses to four questions. The first question asks whether the respondent has experienced any difficulties in planning or pursuing her post-B.A. studies (Table III-12), the second asks whether she thinks women in general have such difficulties because of their sex, and the third asks whether she personally knows of persons who have had such difficulties. The fourth item in the Index picks up only those kinds of difficulties personally experienced (Table III-13) which are of a discriminatory nature (rather than having to do with role conflict, husband, etc.). Each woman's score on this Index was computed and the group averages are presented in Table III-16. The relationships remain the same.

Respondents were also asked whether they felt they had had any advantages in planning or pursuing post-B.A. studies because of being a woman. One hundred thirty-four women said "No" and sixteen said "Yes." Two of these women (both Role-Innovators) referred to "sex appeal." Other reasons given referred to the value of uniqueness, special recruitment and scholarships for women, husbands' support, help from male students in the lab, freedom from the draft, not being competitive, receiving more social invitations, and having entre to the field via a feminine field, ("got into French through being governess to a French family"). These data are in Table III-17.

They were also asked whether they thought women in general have special advantages in pursuing further education. Thirty-eight did think so, 25 thought only in women's fields, and 88 said "No". Only sixteen of the thirty-eight women who thought women had advantages personally knew women who had used them. Finally, they were asked whether they felt the advantages outweigh the difficulties or vice-versa. Twenty-seven women felt the difficulties were greater than the advantages, seven felt the opposite was true, and seventeen women thought they balanced out. The generalized beliefs that both special difficulties and special advantages in education accrue to women because of their sex are more widespread than the women's own personal experiences or that of her acquaintances warrant.

Table III-14. Kinds Of Difficulties Women In General Are Believed To Have
In Pursuing Further Education, By 1967 Group

	<u>Innovator</u>	<u>Moderate</u>	<u>Traditional</u>	<u>Total</u>
Women's chances of being accepted into grad school are less than men's.	11	10	9	30
Women's chances of getting financial assistance are less than men's.	8	12	8	28
Some professors do not want to take on women graduate students.	13	10	2	25
Women have to do better than men to get the same consideration.	7	9	7	23
Women get left out of the informal occasions when helpful exchanges of information and opinion take place.	4	6	4	14
Getting married and having children introduce more uncertainties into a woman's life than a man's, making it harder for her to plan her studies.	18	21	24	63
In some fields, women are uncomfortable because of the attitudes of their classmates and/or professors.	12	7	6	25
Some schools or departments will not accept part-time students and this often prevents a married woman or mother from going to school.	10	7	6	23

100/100

Table III-14-continued

	<u>Innovator</u>	<u>Moderate</u>	<u>Traditional</u>	<u>Total</u>
1967 Group				
A husband's disapproval is more likely to keep his wife out of school, than the reverse.	6	7	5	18
A woman who is very bright worries about the consequences of outshining her male colleagues.	2	4	0	6
General discrimination; discrimination in certain fields.	5	6	6	17
Internal barriers.	<u>3</u>	<u>2</u>	<u>0</u>	<u>5</u>
Sub-Total	99	101	77	277
No, I don't think women in general have any special difficulties in pursuing further education.	<u>16</u>	<u>10</u>	<u>23</u>	<u>49</u>
Total	115	111	100	326

Table III-15. Personal Knowledge Of Women Who Have Had Difficulties Pursuing Further Education

	1967 Group			
	<u>Innovator</u>	<u>Moderate</u>	<u>Traditional</u>	<u>Total</u>
Yes	25	24	20	69 (54.8)
No	<u>17</u>	<u>17</u>	<u>23</u>	57 (45.2)
	42	41	43	<u>126</u> (100.0)

Table III-16. Average Discrimination Scores By 1967 Group

		1967 Group			<u>Total</u>
		<u>1</u>	<u>2</u>	<u>3</u>	
		<u>Innovator</u>	<u>Moderate</u>	<u>Traditional</u>	
Discrimination: Education					
	$\bar{x}$	2.940	2.333	1.574	2.263
	S.D.	2.736	2.234	1.733	2.315
	N	50	48	54	152
		$t_{1,3}=3.0362$	$p<.005$	$t_{2,3}=1.9108$	$p<.05$
Work					
	$\bar{x}$	3.340	3.042	2.130	2.816
	S.D.	1.757	1.443	1.530	1.657
	N	50	48	54	152
		$t_{1,3}=3.7185$	$p<.001$	$t_{2,3}=3.0593$	$p<.005$
General					
	$\bar{x}$	10.440	9.229	7.389	8.974
	S.D.	4.464	3.732	3.764	4.172
	N	50	48	54	153
		$t_{1,3}=3.7421$	$p<.001$	$t_{2,3}=2.4520$	$p<.01$

Table III-17. Kinds Of Advantages Personally Experienced In
Further Education, By 1967 Group

	1967 Group			<u>Total</u>
	<u>Innovator</u>	<u>Moderate</u>	<u>Traditional</u>	
Being Competent And Female	0	0	1	1
Unusualness Of Being Female In Male-domi- nated Situations; Special Recruitment For Women; Received Special Scholarship For Women Only	1	0	2	3
More Social Invitations	1	0	0	1
Have Entre Via Female Field	0	1	0	1
Less Pressure To Finish Degree	0	1	0	1
Not Competitive	1	0	0	1
Sex Appeal	2	0	0	2
Husband's Support; Men Are Helpful	1	1	0	2
Not Subject To Draft	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>
Total	6	3	4	13

Post-B.A. Work Experience

Three fourths of the women in the study are working and have held an average of 3.5 jobs. In general, their present occupations are very similar to what they said in 1967 they wanted to do. A side-by-side comparison of the specific occupations at each time and for each group is presented in Table III-18. Many of the jobs listed by students refer to part-time or summer jobs. The jobs most frequently mentioned by 1967 Innovators are technician, graduate or research assistants, and computer programmer or systems analyst. The jobs most frequently mentioned by 1967 Moderates are graduate assistant, secondary school teacher, elementary school teacher, and editor or reporter. The jobs most frequently mentioned by 1967 Traditionals are elementary school teacher, nurse, secondary school teacher, medical or dental technician, and secretary. The mean number of jobs they have held is not very different.

Discrimination

A similar series of questions regarding difficulties experienced because of being a woman were asked regarding work experience as were asked about education. One third of the sample reported having such difficulties, half of them Role-Innovators. The data are in Table III-19. The proportions on both questions are considerably higher than was true for educational difficulties (Table III-12). In fact, all the groups experienced greater difficulties in working than in studying.

The most frequently cited problem was discrimination in salary, mentioned by 35 percent of the women, again half of them Innovators. Other complaints were that: less qualified men got the jobs they wanted; women were not accepted into trainee programs, one had to start as secretary, scepticism about hiring a young or married woman because assumed to be temporary, men were less willing to deal with women in authority, harrassment by degrading questions, whole categories of jobs reserved for men only, quotas on the number of women permitted into a job category, lack of part-time jobs and child care, and general discrimination through innuendo and bad manners (like being left out of meetings). Non-discrimination difficulties included women's own internal barriers (one mention) and physical limitations (one mention). These data are in Table III-20.

A later question asked the respondent whether she thought that women in general have special difficulties in the work world because of being women, and if so, to check as many of the fixed

Table III-18. Distribution Of Occupations For 1967 Aspiration And Last
(Or Present) Job, By 1967 Group

<u>Occupation</u>	<u>% Men</u>	<u>Innovator</u>		<u>Moderate</u>		<u>Traditional</u>	
		<u>1967</u>	<u>Last</u>	<u>1967</u>	<u>Last</u>	<u>1967</u>	<u>Last</u>
		<u>Aspiration</u>	<u>Job</u>	<u>Aspiration</u>	<u>Job</u>	<u>Aspiration</u>	<u>Job</u>
Accountant, Auditor	83				1		
Actor, Actress	62			2			
Artist Art Teacher	65			1			
Author	75	4					
College President, Dean,		1					
College Prof., Instructor:							
Biological Sciences	84	3	1				
Chemistry	88	1					
Economics	94	2					
Mathematics	15	1					
Medical Science	83	1					
Physics	97	1					
Psychology	79	1					
Social Sciences	71	1					
Non-scientific	69			1	14		1
Dentist	98	2					

Table III-18 - continued

<u>Occupation</u>	<u>% Men</u>	<u>Innovator</u>		<u>Moderate</u>		<u>Traditional</u>	
		<u>1967</u>	<u>Last</u>	<u>1967</u>	<u>Last</u>	<u>1967</u>	<u>Last</u>
		<u>Aspiration</u>	<u>Job</u>	<u>Aspiration</u>	<u>Job</u>	<u>Aspiration</u>	<u>Job</u>
Designer	87	1					
Editor, Reporter	63		2	6	3		
Lawyer, Judge	96	1	1				
Librarian	14				1		
Natural Scientist							
Biology, Zoology	73	2					
Chemistry	91	2					
Nurse	02					6	5
Personnel, Labor Relations	69			3			
Pharmacist	92	1	1				
Photographer, Film Maker	88						1
Physician, Surgeon	93	2					
Public Relations, Publicity	77	2	1		1		
Recreation Group, Community Organization Workers	57				1		1
Social, Welfare Worker	28		2			4	2

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Table III-18 - continued

<u>Occupation</u>	<u>% Men</u>	<u>Innovator</u>		<u>Moderate</u>		<u>Traditional</u>	
		<u>1967</u>	<u>Last</u>	<u>1967</u>	<u>Last</u>	<u>1967</u>	<u>Last</u>
		<u>Aspiration</u>	<u>Job</u>	<u>Aspiration</u>	<u>Job</u>	<u>Aspiration</u>	<u>Job</u>
Economists	86	1					
Psychologist	69			4			
Misc. Social Science, Market Research, Inter- viewer	73	3	3		2		2
Statistician, Actuary	63		1				
Nursery And Kindergarten Teacher	02					1	
Elementary School Counselor	28					1	
Elementary Teacher	12					11	12
Educational Television	39					1	1
Technician, Medical, Dental, Hospital	38					4	4
Technician, Lab	76						1
Therapist, Healer	46					4	2
Computer Programmer	76	2	5				
Systems Analyst							
Museum Curator, Specialist	85	2	1				

Table III-18 - continued

<u>Occupation</u>	<u>% Men</u>	<u>Innovator</u>		<u>Moderate</u>		<u>Traditional</u>	
		<u>1967</u>	<u>Last</u>	<u>1967</u>	<u>Last</u>	<u>1967</u>	<u>Last</u>
		<u>Aspiration</u>	<u>Job</u>	<u>Aspiration</u>	<u>Job</u>	<u>Aspiration</u>	<u>Job</u>
Graduate Assistants			4				1
Translator, Interpreter	62			1			
Waitress, waiter	2				1		
Buyer, Dept. Head - Store	77	1	2				
Federal Public Administrator	88	3					
Local Public Administrator	73	1					
Manager, Official, Salaried Only	88	8					
Business Services Salaried	79		1				
Salesperson Clerk, Retail	46		1				1
Clerical, Kindred Worker	23		1				
Attendant Medical And Dental Offices	3						
Bookkeeper	16						1
Volunteer Work	50		1				
Advertising Agent, Salesman	86						1

Table III-18 - continued

<u>Occupation</u>	<u>% Men</u>	<u>Innovator</u>		<u>Moderate</u>		<u>Traditional</u>	
		<u>1967</u>	<u>Last</u>	<u>1967</u>	<u>Last</u>	<u>1967</u>	<u>Last</u>
		<u>Aspiration</u>	<u>Job</u>	<u>Aspiration</u>	<u>Job</u>	<u>Aspiration</u>	<u>Job</u>
Secretary	4		2		1	1	4
Secondary Teacher:							
English	23					9	2
French	14		1			5	5
Music	45					1	
Physical Education	64			1	1		
Biology	59			1			
German	32						1
Russian	33				1		
General Science	66						1
Mathematics	55			3			
Social Sciences, History, Art History	61		1	5	3		1
Special Education	55			5	4		2
Speech	27				1	1	1
Other, Visiting, Sub.	33				3	1	3
Secondary School Counselor	51			1			

Table III-18 - continued

<u>Occupation</u>	<u>% Men</u>	<u>Innovator</u>		<u>Moderate</u>		<u>Traditional</u>	
		<u>1967</u>	<u>Last</u>	<u>1967</u>	<u>Last</u>	<u>1967</u>	<u>Last</u>
		<u>Aspiration</u>	<u>Job</u>	<u>Aspiration</u>	<u>Job</u>	<u>Aspiration</u>	<u>Job</u>
Housewife	2					1	
Airline Stewardess	2					1	
Helping Husband	2		1				
No Last Job	-		4		2		

Table III-19. Incidence Of Personal Experience With Difficulties
In Work, By 1967 Group

	1967 Group			
	<u>Innovator</u>	<u>Moderate</u>	<u>Traditional</u>	<u>Total</u>
	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>
	<u>%</u>	<u>%</u>	<u>%</u>	
Yes	24	17	9	50
	48.0	36.2	16.7	
No	26	30	45	101
	52.0	63.8	83.3	
	50	47	54	151
	100.0	100.0	100.0	
x ² =11.79620 df=2 p<.025				

Table III-20. Kinds Of Difficulties Personally Experienced
In Work, By 1967 Group

	1967 Group			Total	
	<u>Innovator</u>	<u>Moderate</u>	<u>Traditional</u>	<u>N</u>	<u>%</u>
Less Qualified Men Got Job I Wanted	1	1	1	3	6.1
Money Discrimination	11	3	3	17	34.8
Excluded From Trainee Program	0	2	1	3	6.1
Scepticism	2	2	0	4	8.2
Men Dislike Women In Authority	1	1	0	2	4.1
Harassment By Degrading Questions	1	2	1	4	8.2
Whole Category Of Jobs Reserved For Men	5	0	1	6	12.2
Quotas For Women	0	1	1	2	4.1
Lack Of Part-time Jobs And Child Care	0	1	0	1	2.0
General Discrimination	2	3	0	5	10.2
Internal Barriers	1	0	0	1	2.0
Physical Limitations	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>2.0</u>
Total	24	17	8	49	
Percent	49.0	34.7	16.3		100.0

alternatives provided as she thought applied. Again, this question elicited substantially higher levels of perceived difficulties than did the questions dealing with personal experience only. The next question again asked whether the respondent herself knew of women who had had such experiences, and one hundred responded "yes". These data are in Tables III-21 and 22.

An Index of Discrimination Awareness in Work was constructed using responses to the four questions which parallel those used in the Index of Discrimination Awareness in Education: 1) whether the respondent has experienced any job related difficulties because of being a woman, 2) whether she thinks women in general have such difficulties because of their sex, 3) whether she personally knows of persons who have had such difficulties, and 4) those kinds of personal difficulties encountered which are clearly discriminatory in nature. Each woman's score on this Index was computed and the group averages are presented in Table III-16. Again, the relationships remain the same as for personal experience whether it is with education or jobs: Innovators experience the most and Traditionals the least, and everyone's score is higher for work difficulties than for educational difficulties.

The respondents were also asked whether they felt they had had any special advantages "in getting the jobs you want, or in getting raises or promotions, or participating in any activities which generally go along with your job, because of being a woman?" One hundred thirty women said "No", and twenty-two said "Yes". The nature of these advantages is shown in Table III-23 by Group. If we exclude those who felt being female was an advantage only in women's fields, we are left with twelve responses indicating femaleness is an asset in the work world, or only seven percent of the sample. Even two of these dealt with the "exploitability" of women workers.

They were also asked whether they thought that women in general have special advantages in the work world because of being women. Twenty-eight thought they did, thirty-nine thought this was true only in women's occupations, and eighty-five said "no". Finally, they were also asked whether they felt the advantages outweigh the difficulties or vice-versa. Forty-three women felt the difficulties outweigh the advantages, three thought the opposite was true, and fourteen thought that they balance out. As with the questions on discrimination in education, the generalized beliefs that both special advantages and special difficulties in work accrue to women because of their sex are more widespread than the women's own personal experience or that of her acquaintances warrant. However, the difference between experience and belief is smaller in the area of work than of education.

Table III-21. Kinds Of Difficulties Women In General Are Believed To Have In Work, By 1967 Group

	1967 Group		
	<u>Innovator</u>	<u>Moderate</u>	<u>Traditional</u>
			<u>Total</u>
Women are not considered permanent employees so employers are more reluctant to hire them.	27	29	22
			78
Women are barred from top management positions.	19	18	11
			48
Women are barred from management functions which deal with the public.	5	9	5
			19
Women are paid less than men for the same jobs.	24	27	15
			66
Women have to put in more years than men to get the same salary.	13	15	10
			38
Women have more difficulty being promoted or hired.	22	21	21
			64
Women have more difficulty getting raises.	10	12	10
			32
Some places put a ceiling on women's salaries.	6	8	5
			19
Women often do not get the credit for the work they've done.	8	11	6
			25
Men are prejudiced against having women in business other than as secretaries or assistants; career women frowned upon, dislike of women as bosses.	21	26	11
			58

Table III-21 - continued

	<u>Innovator</u>	<u>1967 Group</u>	
		<u>Moderate</u>	<u>Traditional</u> <u>Total</u>
Women are prejudiced against women.	8	12	29
Policies discriminate against women, general discrimination.	9	12	29
The image of women as emotional, not capable, not interested, and not knowledgeable keeps women out of certain jobs; men think they will do inferior job.	18	22	54
Women are not thought capable of handling crisis situations.	10	14	34
Women are particularly discriminated against in certain fields like law, medicine, politics; any male dominated field.	19	25	69
Men teachers are preferred over women in elementary schools.	1	3	9
Women are excluded from the camaraderie of male associates.	6	8	22
Women have less self-confidence, dedication, than men; internal barriers.	7	5	13
Other: getting training, treated with deference.	0	3	3
No, I don't think women in general have any special difficulties in the work world because of being women.	5	2	16

Table III-22. Personal Knowledge Of Women Who Have Had
Difficulties In Working, By 1967 Group

	1967 Group						
	Innovator		Moderate		Traditional		Total
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	
Yes	38	86.6	35	74.5	27	50.9	100 68.5%
No	<u>8</u>	<u>13.4</u>	<u>12</u>	<u>25.5</u>	<u>26</u>	<u>49.1</u>	<u>46</u>
Total	46	100.0	47	100.0	53	100.0	146
	x ² =12.58896 df=2 p<.005						

$x^2=12.58896$ $df=2$ $p<.005$

Table III-23. Kinds Of Advantages Personally Experienced In
Work, By 1967 Group

	1967 Group			<u>Total</u>
	<u>Innovator</u>	<u>Moderate</u>	<u>Traditional</u>	
Competence Plus Being Female Was An Advantage	0	1	0	1
In Women's Fields Only	2	3	5	10
Interpersonal Relations Are Better	1	2	0	3
Exploitable	0	1	0	1
Ingratiating Personality	1	0	0	1
Feminine Charms	1	2	0	3
Not Expected To Move Up	1	0	0	1
Threat To Quit More Believable	<u>0</u>	<u>1</u>	<u>1</u>	<u>2</u>
Total	6	10	6	22

The last question asking for the respondents' own difficulties presented a number of response alternatives dealing with various kinds of difficulties, and asked her to check which ones she felt had kept her from getting either the jobs or the training she wanted. There were sixteen response items including "Nothing has kept me from getting the jobs or training I wanted." Forty-two women (28 percent) felt that nothing had kept them from either jobs or training they wanted.

It is interesting that in spite of the general belief that women face substantial difficulties in working and studying which are not subject to their control, on this final, summary question two of the three most frequent problems are attributed to the woman herself: "indecision or hesitation on my part" and "I felt unsure of my ability to do it." The third most frequently mentioned problem is discrimination based on sex or sex and marital status. These data are in Table III-24.

Finally, almost the entire sample agreed that women with children have special difficulties "in pursuing studies or in working because of having children which a man with children, or a man or woman without children, would not have". The major difficulties reported were her special obligations to the child, not having enough time, inadequate child care arrangements, and psychological conflict. Furthermore, two thirds of the respondents knew women who were having these difficulties. There was less agreement that married women have special difficulties in pursuing studies or working aside from those connected with having children. Still, almost two thirds of the sample thought this was true, and two thirds of these women knew other women who were having such difficulties. The major difficulties here were substantially the same: responsibilities, time pressures, and husbands (their demands, their lack of help or support, their anxiety about competition with their wives, and the assumption that their requirements take priority). All the mothers believed that mothers have special difficulties both in trying to work or go to school which non-parents do not have (Table III-25), but the women who are unattached or just going steady are more likely than those married or engaged to believe that married women have special difficulties carrying out these activities (Table III-26).

A third Index, Awareness of General Discrimination, included all the items in the other two indices (Awareness of Work Discrimination and Awareness of Education Discrimination) plus the last four items dealing with difficulties that married women and mothers have, and how many of the difficulties mentioned in each case refer to discrimination per se. The average scores for each

Table III-24. Incidence Of Various Obstacles Which Prevented Respondents
From Getting The Jobs Or Training They Wanted, By 1967 Group

	<u>Kept Me From Jobs I Wanted</u>	<u>Kept Me From Training I Wanted</u>	<u>Number of Persons</u>
Financial obstacles	11	27	36
Indecision or hesitation on my part	34	49	65
Took the wrong courses in college	19	13	25
The necessary courses weren't available	5	12*	15
My grades in college weren't good enough	2	5	7
Certain persons discouraged me	5	15	18
I had the qualifications but needed some encouragement	12	20	26
I felt unsure of my ability to do it	22	22	39
Anti-nepotism rules: in University	2	0	2
in Government	1	1	1
in Business	3	0	3
Discrimination other than on sex	4	1	5
Discrimination against women, engaged women	27**	7	31
I didn't try hard enough	17***	12	22
Other	12	6	15
Nothing has kept me from the jobs or training I wanted	53	56	67

* Seven of these persons are Traditionals, three are Moderates, suggesting that these women might have benefited from a vocational rather than a liberal arts program.

** 11 Innovators, 10 Moderates, 6 Traditionals

*** 8 Innovators, 6 Moderates, 3 Traditionals

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Table II-25. "Do Mothers Have Special Difficulties In Working Or Studying?" By Maternity And Marital Status

	Mothers		Married Women w/o Children		Never Married Women		Total	
	N	%	N	%	N	%	N	%
Yes	22	100.0	5	83.3	116	94.3	143	94.7
No	<u>0</u>	<u>0.0</u>	<u>1</u>	<u>16.7</u>	<u>7</u>	<u>5.7</u>	<u>8</u>	<u>5.3</u>
Total	22	100.0	6	100.0	123	100.0	151	100.0

Table III-26. "Do Married Women Have Special Difficulties In Working Or Studying?", By Marital Status

	Married		Engaged		Going Steady		Unattached		Total	
	N	%	N	%	N	%	N	%	N	%
Yes	55	59.1	5	55.6	12	70.6	22	68.8	94	62.3
No	<u>38</u>	<u>40.9</u>	<u>4</u>	<u>44.4</u>	<u>5</u>	<u>29.4</u>	<u>10</u>	<u>31.3</u>	<u>57</u>	<u>37.7</u>
Total	93	100.0	9	100.0	17	100.0	32	100.0	151	100.0

of the groups on this Index is also presented in Table III-16. Again Innovators score highest on this measure and Traditionals lowest. In addition, the differences between the groups are larger on the more inclusive measure.

Career Commitment

In the initial study, commitment to one's career was strongly related to Role-Innovation. The questions used to assess commitment included the respondent's rating of her career in terms of its "importance in your life after graduation", and her expectations of working after marriage, working after having children, and how soon she would return to work or studies after having children. An index which combines these items does not correlate with any of the 1970 sex-ratio measures of work or studies.

The last three questions were repeated in the follow-up study, and the first question was replaced with the following: "To what extent is the following statement true of you? 'I want and intend to have a career; my husband will have to take that for granted and adjust accordingly,'" to which the respondent indicated how true the statement was of herself. This measure correlates only moderately with the 1967 Role-Innovation Score ($r=.23$) and with the respondent's present Role-Innovation Score ($r=.29$). The distribution of the criterion groups' responses are in Table III-27.

There is not much correspondence between the 1967 and 1970 responses to the question of whether the woman intends to work after having children. The reason is that an overwhelming majority now say that they will do so, whatever their response was in 1967. These data are in Table III-28. This is as true for those who already have children--some of whom have already returned to work--as for the rest (see Tables III-41 and 42).

There is a strong association between the 1967 and 1970 responses to the question of how soon the respondent would return to work after having children, though there is a general shift toward preferring earlier resumption of work. The same is true for mothers, and for them the shift is even stronger, thus lowering the overall degree of association between the two measures. Whereas among the non-mothers 67 percent would now return to work sooner and 13 percent would return later than said they would in 1967, among the mothers these figures are 74 percent and 5 percent. About one fifth of both groups have not shifted in either direction. This might mean that the expected pleasures of staying home to care for a small child had been overestimated. The data are in Table III-29. The 1970 responses to this question correlate moderately well with the sex-ratio in the respondents'

Table III-27. "I Want And Intend To Have A Career..." (1970),
By 1967 Group

<u>1967 Group</u>		<u>"Very True"</u> <u>"Somewhat True"</u>	<u>"Not Very True"</u> <u>"Not At All True"</u>	<u>Total</u>
Innovator	N	32	18	50
	%	64.0	36.0	100.0
Moderate	N	27	21	48
	%	56.4	43.6	100.0
Traditional	N	22	32	54
	%	40.8	59.2	100.0
Total		81	71	152
Percent		53.3	46.7	100.0

Table III-28. Respondent's Intention In 1967 And In 1970
To Work After Having Children

<u>1970</u>	<u>Yes</u>	<u>Uncertain</u>	1967 <u>No</u>	<u>Total</u>	<u>Percent</u>
Have Returned	2	1	2	5	3.3
Yes	62	32	18	112	74.7
Uncertain	9	9	7	25	16.7
No	2	4	2	8	5.3
Total	75	46	29	150	100.0
Percent	50.0	30.7	19.3	100.0	

Table III-29. Timing Of Return To Work After Children As Intended
In 1967 And In 1970, For Mothers* And Non-Mothers

1967	1970								
	0	1	2	3	4	5	6	7	
0			1		1	1		1	
1			1	2			1		
2	1	1		3	2	6		4	
			(1)			(2)		(1)	
3					4	6	3	3	
						(1)		(1)	
4	1			4	3	11	2	9	
						(3)			
5			1	1	1	15	8	6	
						(3)	(1)	(3)	
6							3	8	
								(2)	
7						4	1	4	
							(1)		
									Total

* (In Parentheses)

125
(19)

Non-Mothers: Gamma = .34883 | 84 (67.2%) Want To Return Sooner
1967 $\bar{x}$ = 4.04 | 16 (12.8%) Want To Return Later
1970 $\bar{x}$ = 5.24 | 25 (20.0%) Haven't Changed

Mothers: Gamma = .52174 | 14 (73.6%) Want To Return Sooner
1967 $\bar{x}$ = 4.21 | 1 (5.3%) Want To Return Later
1970 $\bar{x}$ = 5.68 | 4 (21.1%) Haven't Changed

- 0 = Does not expect to work after having children.
- 1 = When the children leave home.
- 2 = When the children go to college.
- 3 = When the children go into high school.
- 4 = When the children go into junior high school.
- 5 = When the children go into kindergarten or 1st grade.
- 6 = When the children go into nursery school.
- 7 = Soon after the children are born.

Present Major Activity ($r=.27$) but not with any of the other 1970 sex-ratio measures (of occupation or graduate field). This suggests that most of the relationship does derive from those now classified as housewives but who hope for an early return to non-domestic activity. The responses to this question according to criterion group are in Table III-30. Role-Innovators still tend to want to return to work or studies sooner than the others, as they did in 1967.

Marriage

In 1967, almost everyone wanted to get married, and to do so within four years of graduation. Innovators wanted to wait somewhat longer than the other women. In 1970, sixty-one percent of the women are married, another six percent are engaged, and eleven percent are "going steady". The latter term was in several cases a euphemism for living together. Being "attached" in any of these ways is slightly less common among the Innovators, most common among the Moderates, but the association between group classification and marital status is not statistically significant. The data are in Table III-31. Much more predictive of the timing of marriage is their earlier statement about when they wanted to marry. These women thus appear to exercise significant positive control over this highly critical area of their lives. (This appears to be less true of the timing of their first pregnancy.) The data are in Table III-32. For the women who are not married, present desires to marry are unrelated to what they said in 1967, but this change in desire could be either the cause or the result of their present status.

There was some evidence in the initial study that women tended to pick male friends whose attitudes toward women working were consistent with their own aspirations. There was also, however, some indication that the women tended to overestimate the extent to which men object, at least overtly, to wives having careers. On the other hand, we have also seen that many of the women perceive husbands as a major source of wives' difficulties in the pursuit of a career. It was, unfortunately, not possible to question the husbands of these women directly. We did, however, ask the women about their husband's (fiance's, boyfriends, etc.) attitudes toward their working, and towards different kinds of work they might do. In response to the question "How do you think your husband (fiance, boyfriend) would feel about your having a career?" half of the women say he would like it (about equally so in each of the criterion groups), less than forty percent think he would be fairly neutral, and only ten women say he would be against it (nine of them Traditionals or Moderates).

Table III-30. Timing Of Return To Work After Children, By 1967 Group

<u>Will Return To Work:</u>	<u>1967 Group</u>			<u>Total</u>
	<u>1</u> <u>Innovator</u>	<u>2</u> <u>Moderate</u>	<u>3</u> <u>Traditional</u>	
7. Soon After Birth	21	12	11	44
6. Nursery School	7	9	5	21
5. Kindergarten/1st Gr	14	15	23	52
4. Jr High School	2	2	7	11
3. High School	5	2	3	10
2. College	0	1	3	4
1. Leave Home	0	1	0	1
0. Never	<u>1</u>	<u>1</u>	<u>2</u>	<u>4</u>
Total	50	43	54	147
$\bar{x} =$	5.640	5.350	4.907	5.429
	$t_{1,3}=2.3086 \quad p<.025$			

Nursery School or sooner

Kindergarten or later

Total

28	21	16
<u>22</u>	<u>22</u>	<u>38</u>
50	43	54

$$\chi^2=7.838 \quad df=2 \quad p<.025$$

Table III-31. Marital Status In 1970 By 1967 Group

	1967 Group		
	<u>Innovator</u>	<u>Moderate</u>	<u>Traditional</u>
			<u>Total</u>
Married	28	30	35
Engaged	3	3	3
Going Steady	6	7	4
None Of The Above	<u>13</u>	<u>8</u>	<u>12</u>
Total	50	48	<u>54</u>
			<u>152</u>

Table III-32. Interval Between Graduation And Marriage, By When Marriage Was Wanted In 1967

When Marriage Was Wanted In 1967	Married Before Graduation	BA - Marriage Interval (In Months)						Total
		0-6	7-12	13-18	19-24	25-30	31-36	
Already Married	2	0	0	0	0	0	0	2
As Soon As Possible	0	18	2	4	1	2	1	28
In 1-2 Years	0	2	6	11	12	6	2	39
In 3-4 Years	0	1	0	7	6	2	1	17
In 5-10 Years	0	0	1	3	1	0	0	<u>5</u> 91

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These data are in Table III-33. There is some trend in this Table for the Innovators to have more favorable mates, and the relationship is even stronger when the unmarried women are excluded--as in Table III-34. This reinforces the common assumption that women are more selective in their choice of husbands than of boyfriends, and furthermore, that this attitude is one component of the basis of selection. The difficulties would seem to stem, then, less from men's explicit ideology about whether wives should have careers, but more from the implicit assumptions which shape the day-to-day expectations that husbands have of their wives. There was also no relationship between the Career Woman Stereotype Score (the extent to which the woman's self-description is like the Stereotype) and her man's attitude toward her having a career.

The relationship between marital status, husband's attitude and actual changes in Role-Innovation will be discussed in a later section.

Motherhood

If marriage brings about significant changes in a woman's life, it is even more true of having children. This is because the new obligations and responsibilities that come with motherhood have fewer if any reciprocal obligations from the new role-partner (the baby) or the old one (the father), and therefore few complementary rights and privileges. One of the few new privileges is the socially approved right to withdraw from the labor force, or from training leading to work. It is therefore important to examine how these women anticipated maternity and how it actually affected them.

In 1967 all of these women wanted to have children, and almost all of them wanted at least two children. In answer to the question "If you do want to have children, how many would you like to have?", the responses averaged to 3.47, a rather high figure for a college-educated population. Yet, even at that time, 1967 Role-Innovators and Moderates wanted significantly fewer children than Traditionals, and Role-Innovators wanted to start their families significantly later than either Moderates or Traditionals. They were more likely to expect to work after marriage, after having children, and to return to work sooner after having had children.

Each of these questions was repeated in the follow-up study and the group differences remain significant and in the same direction. There is, however, an overall decline in the number of children now wanted, to an average of 2.38 children. This is a

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Table III-33. Man's Attitude Toward Respondent's Having A Career (1970), By 1967 Group

	1967 Group			
	Innovator N %	Moderate N %	Traditional N %	Total N %
Like It	19 55.9	19 52.8	20 51.3	58 53.2
All Right	12 35.3	14 38.9	6 15.4	32 29.3
Not Matter	2 5.9	0 0.0	7 17.9	9 8.3
Not Like It	1 2.9	3 8.3	6 15.4	10 9.2
Total	34 100.0	36 100.0	39 100.0	109 100.0

Table III-34. Husband's Attitude Toward Wife's Having A Career (1970),
By 1967 Group, For Married Women Only

	1967 Group			
	Innovator N %	Moderate N %	Traditional N %	Total N %
He Would Like It, Thinks It's A Good Idea	13 48.1	14 48.3	16 47.1	43 47.8
It Would Be OK With Him, Although It Might Cause Some Problems	12 44.4	12 41.4	6 17.6	30 33.3
It Wouldn't Matter To Him One Way Or The Other	1 3.7	0 0.0	7 20.6	8 8.9
He Would Not Like It Total	1 3.7	3 10.3	5 14.7	9 10.0
	27 100.0	29 100.0	34 100.0	90 100.0

$\chi^2=14.53564$
df=6
p<.025

very significant decline from previous desires and is welcome news to those concerned about population growth. See Table III-35. Out of 124 women for whom both 1967 and 1970 data on this question are available, sixty-two percent want fewer children now than they did before, thirty-four percent want the same, and four percent want more. See Table III-36. Out of eighteen mothers who answered this question in 1967 and 1970, seven now want fewer children, ten want the same as before, and one person wants one more than she wanted before. See Table III-37. The statistics for Table III-37 show that individual stability in rank order of number children wanted is quite significant. The Tau B correlation is .41. When we asked how many children they think they will actually have (expected number), the average drops further, to 2.29 children. See Table III-38. A comparison of the expected and ideal number of children can be used to suggest the extent to which a person feels she controls a major aspect of her life. In general, studies of comparable socio-economic standing tend to indicate a fairly high degree of control over this area of behavior, and ideal-expected discrepancies tend to be small. This is the case here as well, though there were discrepancies in both directions. Table III-39 shows the number and percent of women in each Group whose expected number of children is less than, the same as, and more than their ideal number. For almost two thirds of each Group, there is no discrepancy. Another quarter expect to have fewer than their ideal, and many are planning to adopt children. Only seven percent feel they will have more than they really want. The group differences are negligible.

A possible source of the ideal-expected discrepancy could be the husband's desires. These data are presented for married women only in Table III-40. Here the husbands' desires follow the pattern of their wives', with husbands of Innovators wanting significantly fewer children than husbands of Moderates or Traditionals and fewer even than their wives want.

An interesting comparison exists between mothers and non-mothers on the repeated question of whether they will work after having children and how soon would they do so. Although more of the mothers than the non-mothers initially said they would not work or were uncertain whether they would, we now find that a higher proportion of them have either already returned to work or say that they will do so, than the non-mothers; and a much smaller proportion of the mothers are now uncertain whether they will return to work. In both samples, the proportions saying they will return has increased and the proportion saying no or that they are uncertain has decreased. See Tables III-41 and 42.

Table III-35. Ideal Number Of Children Wanted In 1970, By 1967 Group

	1967 Group			<u>Total</u>
	<u>1</u> <u>Innovator</u>	<u>2</u> <u>Moderate</u>	<u>3</u> <u>Traditional</u>	
0	2	2	1	5
1	3	2	1	6
2	34	23	25	82
3	7	9	13	29
4	3	8	13	24
5	<u>0</u>	<u>1</u>	<u>1</u>	<u>2</u>
Total	49	45	54	148
$\bar{x}$	2.12	2.49	2.72	2.38
	$t_{1,2}=1.921 \quad p<.05$		$t_{1,3}=3.384 \quad p<.001$	

2 Or Less	39	79.6%	27	60.0%	27	50.0%	93
3 Or More	<u>10</u>		<u>18</u>		<u>27</u>		<u>55</u>
	49		45		54		148
	$\chi^2=9.852 \quad df=2 \quad p<.01$						

Table III-36. Ideal Number Of Children Wanted In 1967 And In 1970

Ideal Number In 1967	Ideal Number In 1970						Total
	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	
0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	1
2	0	0	18	1	0	0	19
3	1	2	23	11	3	0	40
4	1	2	23	8	12	1	47
5	<u>0</u>	<u>0</u>	<u>5</u>	<u>4</u>	<u>7</u>	<u>1</u>	<u>17</u>
Total	3	4	69	24	22	2	124

Want More: 5 (4.1%)

Want Less: 77 (62.0%)

Want The Same: 42 (33.9%)
(100.0%)

Tau B=.33440

Table III-37. Ideal Number Of Children Wanted In 1967 And
In 1970, For Mothers Only

Ideal Number Wanted In 1967	Ideal Number Wanted In 1970				
	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>Total</u>
3	3	1	1	0	5
3-4	0	1	2	0	3
4	3	1	2	0	6
4+	<u>0</u>	<u>0</u>	<u>3</u>	<u>1</u>	<u>4</u>
Total	6	3	8	1	18

Want More: 1 (5.6%)
 Want Less: 7 (38.9%)
 Want The Same: 10 (55.5%)
 (100.0%)

Tau B=.40765

Table III-38. Expected Number Of Children (1970), By 1967 Group

<u>Expected Number Children</u>	<u>1967 Group</u>			<u>Total</u>
	<u>1 Innovator</u>	<u>2 Moderate</u>	<u>3 Traditional</u>	
0	2	1	0	3
1	5	1	3	9
2	27	26	24	77
3	12	11	17	40
4	0	1	5	6
5	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>
Total	46	41	49	136
Mean	2.07	2.32	2.49	2.29
S.D.	.7344	.7792	.7595	

$$t_{1,3}=2.7404 \quad p<.005$$

$$t_{1,2}=1.95 \quad p<.05$$

Table III-39. Discrepancy Between Expected And Ideal Number
Of Children (1970), By 1967 Group

1967 Group	Expected Number Is:						Total	
	Less Than Ideal		Same As Ideal		More Than Ideal			
	N	%	N	%	N	%	N	%
Innovator	12	26.1	30	65.2	4	8.7	46	100.0
Moderate	12	29.3	26	63.4	3	7.3	41	100.0
Traditional	14	28.5	32	65.3	3	6.1	49	100.0
Total	38	28.0	88	64.7	10	7.4	136	100.0

Table III-40. Average Number Of Children Husbands Ideally
Want (1970), By 1967 Group

	Mean	S.D.	N
1. Innovators' Husbands	2.03	.9579	26
2. Moderates' Husbands	2.59	1.1366	27
3. Traditionals' Husbands	2.93	1.5119	31

$$t_{1,2} = 1.9015 \quad p < .05$$

$$t_{1,3} = 2.5817 \quad p < .01$$

Table III-41. Respondent's Intention In 1967 And In 1970 To Work
After Having Children, For Non-Mothers Only

Expectation In 1967	Expectation In 1970			Total	
	Yes	Uncertain	No	N	%
Yes	56	9	2	67	51.9
Uncertain	27	8	4	39	30.3
No	<u>16</u>	<u>6</u>	<u>1</u>	<u>23</u>	<u>17.8</u>
Total	99	23	7	129	
Percent	76.8	17.8	5.4		100.0

Table III-42. Respondent's Intention In 1967 And In 1970 To Work
After Having Children, For Mothers Only

Expectation In 1967	Expectation In 1970				Total	
	I Have Already Returned	Yes	Uncertain	No	N	%
Yes	2	6	0	0	8	38.1
Uncertain	1	5	1	0	7	33.3
No	<u>2</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>6</u>	<u>28.6</u>
Total	5	13	2	1	21	
Percent	23.8	61.9	9.5	4.8		100.0

Since having children does mark such an important transition point in a woman's life, and tends to strongly influence her other options and priorities, it is important to look at the desired and actual timing of the first birth itself. Desired timing of first birth is shown separately for wives and unmarried women in Tables III-43 and 44. Among the unmarried women, there is no overall shift in these plans. Slightly over one third want their first child later, while slightly less than one third want their first child sooner. Among wives, however, twenty-nine percent have already had children within the period they had specified in 1967. Of the remaining 65 wives, only eighteen percent want their first child later, thirty-seven percent want children sooner, and forty-five percent have not changed their desired timing. Comparing these data to the unmarried women, it appears that marriage does trigger fertility desires, and delaying marriage would result in later first births.

The first birth interval is a term used by demographers to denote the amount of time in months, between date of marriage and date of first birth. This is our only measure of actual fertility behavior in this sample, since only three women are in their second pregnancy (all of these wanted more than three children in 1967). Twenty-nine women in this sample have been pregnant. Of these, two miscarried, four had abortions, and one infant died. Thus there are twenty-two mothers in the sample with one living child each. The distribution of the first birth interval by group is shown in Table III-45 and a summary of pregnancy experiences is given in Table III-46.

A comparison between the expectations and behavior of the married and engaged women in Table III-47 includes women who are pregnant (for whom the first birth interval is calculated on the basis of expected due date). "Open Interval" indicates no pregnancy to date. Of thirty-eight women for whom a first birth interval is thus calculated almost half are having or have had a baby earlier than they said they wanted in 1967. For not quite one fifth the first birth is later than they wanted, and for the remaining third the timing is roughly what they wanted in 1967. Moreover, there is no relationship between the timing desired in 1967 and the actual timing of the first birth relative to date of marriage. Neither do the Groups differ in the size of the interval between graduation and first birth, as shown in Table III-48.

A separate question asked each woman who had been pregnant to indicate whether they felt the timing of that pregnancy was "Very Poor", "Earlier than Expected", "Just Right", or "Overdue". It is possible for even an unexpected event to have minimal

Table III-43. Respondent's Intention In 1967 And In 1970 Of When To Have Children, For Unmarried Women Only

Desired Timing Of Children In 1967	Desired Timing Of Children In 1970					Total	%
	As Soon As Possible	1-2 yrs. After Marriage	3-4 yrs. After Marriage	5-10 yrs. After Marriage	Not Now; Depends; Don't Know	Don't Want Children	
As Soon As Possible	0	0	1	0	0	1	1.7
1-2 yrs. After Marriage	3	10	8	0	3	26	44.8
3-4 yrs. After Marriage	0	8	8	3	3	22	37.9
5-10 yrs. After Marriage	0	2	3	1	1	7	12.1
Don't Want Children	0	1	0	0	0	1	3.4
Total	3	21	20	4	7	58	
Percent	5.2	36.2	34.5	6.9	12.1		100.0
Want Children Sooner:	17	(29.3%)					
Want Children Later:	21	(36.2%)					
No Change:	20	(34.5%)					
	58	(100.0%)					

Tau B=.11087

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Table III-44. Respondent's Intention In 1967 And In 1970 Of When To Have Children, For Married Women Only

Desired Timing Of Children In 1967	Desired Timing Of Children In 1970					Total	%
	Already Have Children	As Soon As Possible	1-2 yrs. After Marriage	3-4 yrs. After Marriage	5-10 yrs. After Marriage	Don't Want Children	
As Soon As Possible	3	0	2	0	0	5	5.4
1-2 yrs. After Marriage	11	3	16	5	1	36	39.1
3-4 yrs. After Marriage	12	3	12	10	2	40	43.5
5-10 yrs. After Marriage	1	0	3	2	3	9	9.8
More Than 10 yrs. After Marriage	0	0	0	0	0	1	1.1
Don't want Children	0	0	0	0	0	0	0
Total	27	6	33	18	6	92	100.0
Percent	29.3	6.5	35.9	19.6	6.5	2.2	
Want Or Have Had Children Sooner:	25						
Want Children Later:	12						
No Change:	55						
	92						
Tau B=.26474							

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Table III-45. Interval Between Marriage And First Birth
("First Birth Interval"), By 1967 Group

		First Birth Interval						
<u>1967 Group</u>		<u>Less Than</u> <u>9 mos.</u>	<u>9-12</u> <u>mos.</u>	<u>13-24</u> <u>mos.</u>	<u>25-36</u> <u>mos.</u>	<u>37+</u> <u>mos.</u>	<u>Open</u> <u>Interval</u>	<u>Total</u>
Innovator	N	3	0	4	4	1	20	32
	Row %	9.4	0.0	12.5	12.5	3.1	62.5	31.7
Moderate	N	5	1	5	3	0	19	33
	Row %	15.1	3.0	15.2	9.1	0	57.6	32.7
Traditional	N	3	1	3	4	1	24	36
	Row %	<u>8.4</u>	<u>2.8</u>	<u>8.4</u>	<u>11.2</u>	<u>2.8</u>	<u>66.7</u>	<u>35.6</u>
	Total	11	2	12	11	2	63	101
	Percent	10.9	2.0	11.9	10.9	2.0	62.4	100.0

Table III-46. Summary Of Pregnancy Experience, By 1967 Group

<u>1967 Group</u>	<u>Abort.</u>		<u>1-8 Mos.</u>	<u>Regular (Not Pre- Marital) Pregnancy</u>	<u>Open Interval</u>	<u>Never Pregnant Nor Married</u>	<u>X F.B.I.*</u>			<u>Total</u>
	<u>N</u>	<u>Miscrq.</u>					<u>Incl. Abort. Miscrq.</u>	<u>Excl. Abort. Miscrq.</u>		
<u>Innovator</u>	2	4.0	1	9	20	18	19.08	22.90	50	
	%		2.0	18.0	40.0	36.0			100.0	
<u>Moderate</u>	2	4.2	3	9	19	15	15.35	22.08	48	
	%		6.3	18.7	39.6	31.2			100.0	
<u>Traditional</u>	1	1.5	2	9	24	18	20.00	21.81	54	
	%		3.7	16.9	44.5	33.4			100.0	
<u>Total</u>	5	5	6	27	63	51			152	
<u>Percent</u>	3.28	3.28	3.94	17.8	41.4	33.6			100.0	

* First Birth Interval

Table III-47. First Birth Interval And Timing Of Children Wanted In 1967

F.B.I. In Months	When To Have Children (1967)						Total N	%
	As Soon As Possible	1-2 yrs. After Marriage	3-4 yrs. After Marriage	5-10 yrs. After Marriage	10 yrs. After Marriage	Don't Want Children		
< 1 Month	0	2	1	1	0	0	4	4.0
1-8	1	3	1	1	0	1	7	6.9
9-12	1	0	1	0	0	0	2	2.0
13-18	1	2	4	0	0	0	7	6.9
19-24	0	3	2	0	0	0	5	5.0
25-30	0	1	3	1	0	0	5	5.0
31-36	0	4	2	0	0	0	6	5.9
37+	0	1	1	0	0	0	2	2.0
Open	2	25	26	8	1	1	63	62.4
Total	5	41	41	11	1	2	101	
Percent	5.0	40.6	40.6	10.9	1.0	2.0		100.0

Had Children Earlier: 18 (47.4%)

Had Children Later: 7 (18.4%)

No Difference: $\frac{13}{38}$ (34.2%)
 $\frac{38}{101}$ (100.0%)

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Table III-48. Interval Between Graduation And First Birth, By 1967 Group

1967 Group	Graduation - Birth Interval							Never Pregnant	Total N %
	9 mos.	10-12 mos.	13-18 mos.	19-24 mos.	25-30 mos.	31-36 mos.	37-42 mos.		
Innovator	1	0	2	1	0	1	2	43	50 32.9
Moderate	1	1	2	1	3	1	3	36	48 31.6
Traditional	0	0	1	2	3	2	1	45	54 35.5
Total	2	1	5	4	6	4	6		152
Percent	7.1	3.6	17.9	14.3	21.4	14.3	21.4		100.0

Table III-49. Desirability Of The Timing Of The First Pregnancy, By 1967 Group

1967 Group	Timing				Total
	Very Poor	Earlier Than Expected	Just Right	Overdue	
Innovator	0	6	0	0	6
Moderate	4	2	6	0	12
Traditional	0	5	2	1	8
Total	4	13	8	1	26

psychological costs. The responses to this question, as shown in Table III-49 suggest that the most distress on account of too early pregnancy, was experienced by the Moderates.

Another set of relationships with desirability of the timing of the first pregnancy looks at the question of whether the respondent reported feeling that there was a conflict between her plans for a marriage and having a career. Such a conflict might result from too early pregnancy even when there was no conflict before, or it might represent a behavioral resolution to the conflict by putting the pursuit of a career temporarily out of reach. The question about Conflict was asked in 1967 and in 1970. The responses are shown according to desirability of the timing of the first pregnancy in Tables III-50 and 51. There are several interesting aspects of these tables and of the comparison between them.

Only two persons in 1967 said that they did not want to marry at all, both have been pregnant and both feel the timing was bad. Over half of the parous women (i.e., women who have been pregnant) reported feeling no conflict over wanting both a career and marriage in 1967, but of these two thirds now say that the pregnancy was too early. As a group, those who admitted feeling conflict in 1967 now report the least distress over the timing of the pregnancy. Those who didn't want a career in 1967 are most likely to feel their pregnancy was "earlier than expected."

In Table III-51 the proportion of these women reporting no conflict has dropped from 58 percent to 31 percent and the proportion reporting conflict has doubled from 15.4 percent to 30.8 percent, and so has the proportion saying that they do not want to have a career (from 19.2 percent to 34.6 percent). Of the seventeen women feeling their first pregnancy came too early, 29 percent now report feeling conflict as compared to 6 percent reporting conflict in 1967. Although the total number of cases involved is small, it seems quite clear that the onset of pregnancy, particularly if it is earlier than expected, increases women's experienced conflict between being married and having a career. It should be emphasized too, that respondents were not constrained by an externally imposed definition of "career", but were free to conceive of it in their own terms, thus permitting them to reduce some of the conflict by defining one of the terms (probably "career") idiosyncratically.

Consistent with the above, open-ended responses to the question of how motherhood has changed feelings about working or studying indicate that almost half of the changes are in the direction of decreasing the desire to work or study, and another

Table III-50. Desirability Of The Timing Of The First
Pregnancy, By Conflict Felt In 1967

Marriage-Career Conflict In 1967	Timing									
	Very		Earlier		Just		Overdue		Total	
	Poor		Than		Right					
	N	%	N	%	N	%	N	%	N	%
Want Both, No Conflict	3	20.0	7	46.7	4	26.7	1	6.7	15	57.7
Yes, Conflict	0	0.0	1	25.0	3	75.0	0	0.0	4	15.4
Don't Want Career	0	0.0	4	80.0	1	20.0	0	0.0	5	19.2
Don't Want To Marry	<u>1</u>	<u>50.0</u>	<u>1</u>	<u>50.0</u>	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0.0</u>	<u>2</u>	<u>7.7</u>
Total	4	15.4	13	50.0	8	30.8	1	3.8	26	100.0

Table III-51. Desirability Of The Timing Of The First
Pregnancy, By Conflict Felt In 1970

Marriage-Career Conflict In 1970	Timing									
	Very		Earlier		Just		Overdue		Total	
	Poor		Than		Right					
	N	%	N	%	N	%	N	%	N	%
Want Both, No Conflict	2	25.0	5	62.5	0	0.0	1	12.5	8	30.8
Yes, Conflict	2	25.0	3	37.5	3	37.5	0	0.0	8	30.8
No Career	0	0.0	4	44.4	5	55.6	0	0.0	9	34.6
No Marriage	<u>0</u>	<u>0.0</u>	<u>1</u>	<u>100.0</u>	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0.0</u>	<u>1</u>	<u>3.8</u>
Total	4	15.4	13	50.0	8	30.8	1	3.8	26	100.0

quarter experience greater difficulty in working or studying. Twenty-nine percent of those experiencing a change of feeling report an increase in desire or a greater ease in working or studying. Seven of the parous women report no change in their feelings about working or studying. These data are presented in Tables III-52 and 52a by Group.

One aspect of family formation over which there is no control, yet about which people often have rather strong preferences, is the sex of one's offspring. Partly because of these preferences the prospect of acquiring control over the sex of the conceptus raises questions of enormous ethical and practical implications. Such preferences are also some part of the decision by some parents to have another child. It was expected that in this college-educated sample such preferences for girls or boys would not be large. However, the data in Table III-53 show that the traditional preference for boys is still significant for these respondents and their husbands. There are also interesting differences between the Groups in their sex preferences for their children. Although the majority of each Group and of their husbands is for "at least one of each" or "an equal number of each" sex, when a preference is expressed it is always greater for boys than for girls, in each Group and for each Group's husbands. However, the most "egalitarian" group (most frequently expressing no preference) are the Role-Innovators, they are also least likely to prefer boys, and show the least difference in the proportion preferring boys and those preferring girls. However, their husbands (and those of Moderates) are the most likely to prefer boys and the husbands of Traditionals are the most likely to prefer girls. The Traditional women themselves are the least likely to prefer girls. These contrasts raise fascinating speculations about the psychodynamics of gender preference for children, but these are left to the ingenuity of the reader.

Attitudes Related to Family Formation and the Women's Movement

In discussing the discrepancy between ideal and expected number of children, it was mentioned that some respondents were already planning to adopt children to complete their desired family size. In response to the fixed-choice question "How do you feel about adopting children?", only two women said that they would not adopt under any circumstances. The modal response for the Traditionals was "I would adopt only if I could not have any of my own", whereas the modal response for the Moderates and Innovators was "I would like to adopt in order to have the number (or sex) I want because I do not want to bear them all myself". Seven women preferred to adopt rather than to bear children, most of them Innovators. These results are consistent with all the

Table III-52. Whether Motherhood Changed Feelings About
Working Or Studying, By 1967 Group

		1967 Group			
		<u>Innovator</u>	<u>Moderate</u>	<u>Traditional</u>	<u>Total</u>
Yes	N	5	7	5	17
	%	83.3	70.0	62.5	70.8
No	N	1	3	3	7
	%	<u>16.7</u>	<u>30.0</u>	<u>30.0</u>	<u>29.2</u>
Total		6	10	8	24
Percent		100.	100.	100.	100.

Table III-52a. Nature Of Change In Feelings About Working Or
Studying, Resulting From Motherhood, By 1967 Group

		1967 Group			
		<u>Innovator</u>	<u>Moderate</u>	<u>Traditional</u>	<u>Total</u>
Less Desire	N	1	4	3	8
	%	20.0	57.1	60.0	47.1
More Desire	N	3	1	0	4
	%	60.0	14.3	0.0	23.5
Easier	N	0	1	0	1
	%	0.0	14.3	0.0	5.9
Harder	N	1	1	2	4
	%	<u>20.0</u>	<u>14.3</u>	<u>40.0</u>	<u>23.5</u>
Total		5	7	5	17
		100.	100.	100.	100.

Table III-53. Desired Sex Of Children In 1970, By 1967 Group, For Respondents And Their Husbands

Desired Sex Of Children		1967 Group								Total	
		Innovator		Moderate		Traditional					
		N	%	N	%	N	%	N	%	N	%
No Mention Of Sex	Women	4	8.7	8	18.7	6	11.3	18	12.7		
	Husbands	2	9.5	5	22.7	2	7.4	9	12.9		
At Least One Each Or Equal Number Of Each	Women	37	80.4	23	53.5	35	66.0	95	66.9		
	Husbands	12	57.1	10	45.5	16	59.3	38	54.3		
Prefer Girls	Women	2	4.3	1	2.3	1	1.9	4	2.8		
	Husbands	1	4.8	1	4.5	4	14.8	6	8.6		
Prefer Boys	Women	3	6.5	11	25.6	11	20.7	25	17.6		
	Husbands	6	28.6	6	27.2	5	18.5	17	24.2		
	Women	46	100.0	43	100.0	53	100.0	142	100.0		
	Husbands	21	100.0	22	100.0	27	100.0	70	100.0		

other findings indicating a greater investment in the traditional female role by Traditionals as compared to the other women. The data are in Table III-54.

The second question relating to family formation asked "How do you feel about abortion?" On this question a majority of each group felt that abortion should be available to any woman on demand. Another third approximately of each group felt "It is a medical and personal decision to be made by a woman and her doctor, not to be regulated by law". Having the decision made by a committee of doctors was the most unpopular alternative as a decision-making method, being endorsed by only one person. Although the Group differences are small, the Innovators appear again to have somewhat more liberal attitudes on this question. The data are in Table III-55.

The abortion issue has been publicized, advocated, and brought to a new stage of public policy largely through the efforts of the Women's Movement. These follow-up data were collected at the time when the Movement was just beginning to get some national attention and quite frequently, "bad press". We asked these women to place their attitude toward the Movement by indicating which of three positions was most similar to their own. The question read as follows: "Now we'd like to ask you how you feel about these organizations, which have some things in common and some differences. All of the groups in this movement want child-care centers, changes in the law regarding abortion, and equal pay for equal work".

1) Some of the organizations want all laws about abortion repealed; a new family structure or none at all; abolition of all forms of discrimination against women; doing away with Mother's Day and beauty contests among other practices which they feel glorify and exploit an image of women as sex objects and consumers; and they want to arouse and educate women on these issues. They emphasize replacing the present economic and political system with a socialist system in which men as well as women should be free to choose the roles they want. These groups employ the tactic of demonstration as well as disruption.

2) Some of the other organizations also share most of these goals: repeal of all abortion laws; equal opportunities for women in employment, education, politics, and religion; freedom of choice of roles for men and women; complete de-sexigration of public facilities like bars, restaurants, and hotels; and a less stereotyped image of women in the mass media. These groups emphasize the opening up of previously male-dominated spheres to women, rather than transformation of the total system, and their

Table III-54. "How Do You Feel About Adopting Children?",
By 1967 Group

		1967 Group			
		<u>Innovator</u>	<u>Moderate</u>	<u>Traditional</u>	<u>Total</u>
1. I would not adopt under any circumstances.	N	1	0	1	2
	%	2.0	0.0	1.9	1.3
2. I would only if I could not have any of my own.	N	10	16	23	49
	%	20.0	33.3	42.6	32.2
3. I would, to have the number (or sex) I want if I couldn't have them all myself.	N	12	9	13	34
	%	24.0	18.8	24.1	22.4
4. I would like to, to have the number (or sex) I want because I do not want to bear them all myself.	N	14	18	10	42
	%	28.0	37.5	18.5	27.6
5. I would prefer to adopt rather than to bear children.	N	4	2	1	7
	%	8.0	4.2	1.9	4.6
Other	N	9	3	6	18
	%	<u>18.0</u>	<u>6.3</u>	<u>11.1</u>	<u>11.8</u>
Total		50	48	54	152
		100.0	100.0	100.0	100.0
	$\bar{x} =$	2.66	2.94	2.43	

Table III-55. "How Do You Feel About Abortion?", By 1967 Group

		1967 Group			Total
		<u>Innovator</u>	<u>Moderate</u>	<u>Traditional</u>	
1. All abortions are immoral and should be illegal.	N	0	1	0	1
	%	0.0	2.1	0.0	0.7
2. Only grounds for abortion should be rape, incest, or danger to life of mother.	N	0	4	3	7
	%	0.0	8.3	5.6	4.6
3. Lawful regulation is necessary, but there should be more grounds for abortion than most present state laws provide.	N	2	1	4	7
	%	4.0	2.1	7.4	4.6
4. Committee of doctors should decide individual cases.	N	0	0	1	1
	%	0.0	0.0	1.9	0.7
5. It's a medical and personal decision to be made by woman and her Dr., not to be regulated by law.	N	18	15	17	50
	%	36.0	31.3	31.5	32.9
6. A woman has the right to decide what happens to her own body. She should be able to get it if she wants it.	N	30	27	29	86
	%	60.0	56.3	53.7	56.6
Total	N	50	48	54	152
	$\bar{x}$	5.52	5.19	5.20	

tactics include legal action in court, writing campaigns and demonstrations (but not disruption.)

3) A third kind of organization is interested only in reform (not repeal) of abortion laws, equal pay for equal work (but not opening all occupations and roles to men and women alike), and child-care centers. The only tactic they endorse is persuasion of men through traditionally feminine means.

"Which of the three kinds of organizations, if any, do you feel best represents your feelings (first, second, or third)?" Many respondents, especially those completing the mail questionnaire, chose to rank order all three alternatives. The responses are given in Table III-56 by Group. They follow the same pattern as on the other attitude items: The Innovators somewhat more radical, the Traditionals somewhat more conservative. However, the overwhelming choice in each group as best representing their own attitudes is the moderate position number two. Unfortunately, we did not ask these questions in the original study, in 1967, so that we cannot tell whether these differences are larger or smaller than they would have been then. Indeed, these differentiations were hardly discernible then. There were other attitude questions dealing in a very mild and general way with acceptance or rejection of traditionality in sex-role expectations, and these showed similar small but consistent differences between the Groups in the same direction, the Role-Innovators being somewhat more liberal, the Traditionals somewhat more conservative (Tangri, 1969).

Table III-56. "Which Point Of View Within The Women's Movement
Best Represents Your Attitude?", By 1967 Group

		1967 Group			Total
		<u>Innovator</u>	<u>Moderate</u>	<u>Traditional</u>	
1. Conservative	N	9	10	12	31
		(18.8)	(21.7)	(25.0)	(21.8)
	%	29.0	32.3	38.7	100.0
2. Moderate	N	30	31	36	97
		(62.5)	(67.4)	(75.0)	(68.3)
	%	30.9	32.0	37.1	100.0
3. Radical	N	9	5	0	14
		(18.8)	(10.9)	(0.0)	(9.9)
	%	<u>64.3</u>	<u>35.7</u>	<u>0.0</u>	<u>100.0</u>
		48	46	48	142
		(100.0)	(100.0)	(100.0)	(100.0)
	$\bar{x}$ =	2.0	1.9	1.7	

$$\chi^2 = 9.61556 \quad df = 4 \quad p < .05$$

PART TWO

ANALYSES OF FACTORS ASSOCIATED WITH RESPONDENTS'

ROLE-INNOVATION IN 1970

Factors Associated with Role-Innovational Activities in 1970

The extent to which the women in this study would in fact carry out or pursue the aspirations they had in 1967, and the reasons they were or were not doing so, was a major interest in the present study. The first part of the last Chapter (Chapter III) and the dozen or so tables referred to there, describe the nature of the respondents' activities in 1970 in terms of work, education, and the Innovativeness of these activities as compared to their aspirations in 1967. All of these data indicated that there had been a shift toward more traditional activities, though in many cases this was a temporary shift, and that in general the modal pattern was to remain within the broad limits of the original goal. The purpose of the present Chapter is to identify those factors which are associated with Role-Innovation in 1970, with particular attention to those which are different from the factors associated with aspirations in 1967 (as presented in Chapter II). Therefore, the data presented in this Chapter are organized around the Role-Innovativeness of the woman's present major activity. The trichotomized distribution of this score is referred to as the 1970 Group. The cut-off points used in the trichotomization are the same as for the 1967 Groups.

Table IV-1 gives the nature of the present major activity for each of the 1970 Groups. Less than half of the 1970 Innovators and Traditionals are working full time as compared to three fourths of the Moderates. The most frequent activity among the 1970 Innovators is studying full time. Thirty-seven percent of the Traditionals list housewife as their present major activity as compared to four percent of the other two groups. The women who put housewife plus something else as their present major activity were classified by the innovativeness of the other activity, thus two of these women were classified as Innovators and one as Moderate.

Marriage

The two female role prescriptions which have the most dampening effect on women's aspirations are that marriage and child-rearing have higher priorities than any other activity which a woman might engage in. These are the role-prescriptions which create conflict for the woman who wants to be a good wife and mother but also a good student or worker. The degree to which this conflict is expressed by women engaged in different activities

Table IV-1. Present Major Activity By 1970 Group

<u>Activity</u>	Innovator		Moderate		1970 Group Traditional		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Working Full-time	19	42.3	19	76.0	38	46.3	76	50.0
Working Part-time	3	6.7	2	8.0	8	9.7	13	8.6
Studying Full-time*	20	44.4	3	12.0	3	3.7	26	17.1
Housewife Or Housewife Plus Other Activity	2	4.4	1	4.0	30	36.6	33	21.7
Other	<u>1</u>	<u>2.2</u>	<u>0</u>	<u>0.0</u>	<u>3</u>	<u>3.7</u>	<u>4</u>	<u>2.6</u>
Total	45	100.0	24	100.0	82	100.0	152	100.0

*Women who were studying part-time listed some other activity as their major one.

at present is shown in Table IV-2. There is a clear positive relationship between Innovativeness of present activity and feeling conflict between wanting a career and being married.

The actual impact of marriage on Role-Innovation is shown in Table IV-3. Within each of the original criterion groups, married women's present activity is less Innovative than that of the single women. (Even so, the Groups remain impressively distinctive, with the mean scores for each marital status of one Group barely overlapping with those of the next Group.) Within the married state, the attitude of the husband toward non-domestic roles being played by his wife has a further impact on the wife's choices. When asked in 1970 about their husband's feelings about their having a career, the women who are in Innovative activity at the present report slightly higher levels of approval from their husbands and fiance's than do the women who were classified as such on the basis of their aspirations only. The women who are now engaged in Traditional activity report the same levels of approval and disapproval from their mates as did the women so classified on the basis of their aspirations only. These data are in Table IV-4. The question did not refer to the nature of the career, but "How do you think your husband or fiance would feel about your having a career?" Although the level of approval reported by the Traditionally-occupied in 1970 is still quite high it is not as high as for the other women, thus creating a continual pressure to decrease commitment to a career. This would be a particular hardship on those women who started out as Innovators but who had children early and are "caught" in the traditional role right now. This pressure would certainly increase any ambivalence she might have toward trying to combine the traditional roles and a career.

The women were also asked why their mates felt the way they did on this question, and the reasons for approving or disapproving of the wife's having a career were classified into three general categories: The attractions or positive value to the wife (of either working or staying home), the avoidance of negative consequences, or the obligations or duties of the wife. Purely financial considerations and the non-committal "whatever I want" responses were classified separately. These data are given in Table IV-5. One of the striking contrasts between this Table and the reasons given in 1967 for their boyfriends' attitudes on this question is the total disappearance of "Attractions of staying home" as a reason for not wanting one's wife to have a career. In other ways, too, the pattern of responses obtained in 1967 about their boyfriends' attitudes is not repeated in Table IV-5. Those presently engaged in Innovative activity are not more likely than the other women to attribute "liberal" attitudes to their

Table IV-2. Conflict Felt In 1970 Between Marriage And Career, By 1970 Group

1970 Group	Strong Conflict		Some Conflict		Don't Want To Marry		Don't Want Career		Want Both No Conflict		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Innovator	0	0.0	20	44.4	0	0.0	5	11.2	20	44.4	45	100.0
Moderate	0	0.0	8	32.0	1	4.0	0	0.0	16	64.0	25	100.0
Traditional	2	2.5	22	27.2	0	0.0	22	27.2	35	43.2	81	100.1
Total	2	1.3	50	33.1	1	0.7	27	17.9	71	47.0	151	100.0

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Table IV-3. Mean Role-Innovation Score In 1970, By 1967 Group
And Marital And Maternal Status In 1970

Marital/Maternal Status	1967 Group			Total
	Innovator	Moderate	Traditional	
All Married Women	(1)	(2)	(3)	(4)
	$\bar{x}$ 51.714	32.967	25.657	35.860
	S 35.673	32.089	24.343	32.1854
	N 28	30	35	93
Married Women Without Children	(5)	(6)	(7)	(8)
	$\bar{x}$ 58.000	45.571	31.786	
	S 33.773	30.261	24.482	
	N 23	21	28	72
Engaged	(9)	(10)	(11)	(12)
	$\bar{x}$ 62.333	62.667	46.000	57.000
	S 13.051	36.528	22.068	23.5797
	N 3	3	3	9
"Going Steady"	(13)	(14)	(15)	(16)
	$\bar{x}$ 65.833	61.571	32.750	56.294
	S 37.344	28.768	18.081	31.5015
	N 6	7	4	17
Unattached	(17)	(18)	(19)	(20)
	$\bar{x}$ 84.000	50.625	37.500	58.152
	S 17.883	24.407	26.328	30.0554
	N 12	8	12	33

Table IV-3 continued

<u>Marital/Maternal Status</u>		<u>Innovator</u>		<u>1967 Group Moderate</u>		<u>Traditional</u>		<u>Total</u>	
All Statuses		(21)	(22)	(23)	(24)	(23)	(24)		
$\bar{x}$		61.880	41.938	29.944	44.237				
S		33.223	32.180	24.518	32.7004				
N		50	48	54	152				
All Statuses Excluding Mothers		(25)	(26)	(27)	(28)				
$\bar{x}$		66.455	50.795	34.234	50.108				
S		30.998	28.986	23.400					
N		44	39	47	130				
		t5, 17=2.4200	p<.025						
		t6, 18= .4081	n.s.						
		t7, 19= .6446	n.s.						
		t21, 22=2.9881	p<.005						
		t21, 23=5.5528	p<.001						
		t22, 23=2.1111	p<.025						
		t25, 26=2.3417	p<.025						
		t25, 27=5.5635	p<.001						
		t26, 27=2.1901	p<.01						

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Table IV-4. Husband's/Fiance's Attitude Toward Respondent
Having A Career, By 1970 Group

		1970 Group			<u>Total</u>
		<u>Innovator</u>	<u>Moderate</u>	<u>Traditional</u>	
He would like the idea	N	14	15	29	58
	%	45.2	75.0	41.4	47.9
It would be all right with him - some problems	N	10	3	19	32
	%	32.3	15.0	27.1	26.4
It wouldn't matter to him	N	2	1	6	9
	%	6.5	5.0	8.6	7.4
He would not like the idea	N	0	0	10	10
	%	0.0	0.0	14.3	8.3
No answer	N	5	1	6	12
	%	<u>16.1</u>	<u>5.0</u>	<u>8.6</u>	<u>9.9</u>
Total		31	20	70	121
		100.0	100.0	100.0	100.0

Table IV-5. Husband's/Fiance's Reason For Liking Or Not Liking
Wife's Having A Career, By 1970 Group

	1970 Group							
	Innovator		Moderate		Traditional		Total	
	N	%	N	%	N	%	N	%
<u>Reasons For Liking It</u>								
My work is important to me.	5	22.7	4	30.8	11	20.4	20	22.6
Otherwise I'd be bored unhappy, other negative consequences.	2	9.1	3	23.1	8	14.8	13	14.6
Everyone has an obligation to use their gifts/education outside of home.	5	22.7	2	15.4	6	11.1	13	14.6
Financial benefits.	0	0.0	2	15.4	4	7.4	6	6.7
<u>Reasons For Not Liking It</u>								
Attractions of staying home.	0	0.0	0	0.0	0	0.0	0	0.0
Avoid negative consequences of working.	5	22.7	0	0.0	5	9.3	10	11.2
Woman has an obligation to stay home.	3	13.7	1	7.7	14	25.9	18	20.2
He would like whatever I want.	2	9.1	1	7.7	6	11.1	9	10.1
Total	22	100.0	13	100.0	54	100.0	89	100.0

mates, i.e., reasons that deal with the woman's achieving personal satisfaction. Although the present Traditionals are most likely to say their mates consider it their duty to stay home, it is the Moderates who are least likely to say this rather than the Innovators. It is further interesting to note that only Moderates and Traditionals attribute economic motives to their mates' attitudes toward their working.

Further dimensions of the husbands' attitudes toward his wife's working were explored in a series of questions describing different circumstances attending his wife's work, and asked each wife to estimate how favorable her husband would be toward that situation. Except for one item, these were adopted from Gross (1969). The first question presents a situation of most direct competition between husband and wife, in which she is more successful than he is in the same field. In the second question she is very successful in a field different from his. The third question reduces the element of competition to a simple question of sharing or allocating time and space between the two roles, and the final question eliminates the competition by reducing the work to something the wife can do at home to satisfy her interests. These data are in Table IV-6. Although the Group differences on any given question are not large, some interesting patterns do emerge. The first question, presenting direct competition between husband and wife elicits clearly negative attributions from all three groups, and is the only situation for which this is the case. The second question, removing the competition by one step, elicits the most favorable attributions overall. Within each group, the first situation is most negatively viewed and the second most positively viewed by both Moderates and Traditionals. Although Role-Innovators also view the first most negatively, the one they view the most positively is the last situation--involving the least competition with husband. If we compare the groups on each question going from most to least competition, we find a striking phenomenon: On the first question the most favorable group is the Traditionals, on the second it is the Moderates, and on the last two questions it is the Role-Innovators!

There are several possible interpretations of these findings, but it is hard to avoid the impression that the competitive element in these situations arouses the most anxiety in those women for whom it has the greatest immediate relevance. Secondly, it appears that the desire to achieve personal success can only be pursued in a context which precludes direct comparison with one's husband. Although it may be reasonably argued that such policies safeguard the marital relationship, which may be primary for many women, it is also true that such a policy could require either

Table IV-6. Husband's/Fiance's Average Favorability Toward Various Circumstances Of Wife's Working, By 1970 Group¹

	1970 Group						Total N
	Innovator $\bar{x}$	N	Moderate $\bar{x}$	N	Traditional $\bar{x}$	N	
You are in the same field as he is and more successful in it than he is.	2.58	31	2.42	19	3.02	67	117
You are in a different field than he is and have achieved notable success in it.	5.06	31	5.35	20	5.33	68	119
Sometimes you work over-time or bring work home with you.	4.63	30	4.10	19	3.90	66	115
You have taken a job inside home to satisfy interests outside home.	5.13	30	4.78	19	4.83	67	116

¹ A higher average indicates more favorable attitude. The range was from 1 for "very unfavorable" to 6 for "very favorable", the neutral point being 3.5.

spouse to "leave the field", yet it is almost universally the case that such an action is expected only of a wife. These data also make it clear that the strongly positive responses in Table IV-4 toward "wife having a career" are anything but open-ended carte blanche for even those wives to pursue whatever goals they want. Rather, it is an acceptance under conditions of clear territorial prerogatives exercised by the husband.

Respondents were also asked whether and what kind of stresses or benefits their working or studying created for their husbands. Innovators were much more likely than Moderates, and the latter more likely than the Traditionals, to feel that their working or studying created stresses for their spouses. On the other hand only a few Moderates felt that it created no benefits. See Table IV-7. The most common stresses reported in each group was the reduction in the respondent's time and energy, cited most frequently by Moderates and least frequently, though still more than anything else by Traditionals. Only three Innovators mentioned the competition created. The husband's sharing of the wife's problems and his having to help with the house or children was considered a stress more by Traditionals than by the others. The most frequently cited benefit in each Group was financial, and the next most frequent was the respondent's own happiness or being a more interesting companion. The Group differences were as one would expect, with fewer Innovators--many of whom are still in school--citing financial benefits, and more Innovators citing their own happiness. These data are in Tables IV-8a and 8b.

The next section deals with the impact of child-bearing on present major activity and related attitudes.

Motherhood

In Table IV-3 we found a strong negative association between marital status and Innovativeness of present major activity, even when controlling for original level of aspiration (1967 Group). To examine what part of this association is due to child-bearing, a similar Table was composed (Table IV-9) using the First Birth Interval instead of marital status and again controlling for 1967 aspirations. From this Table it is clear that the major determinant of Innovativeness of present major activity is not marriage per se, but child-bearing since the average Role-Innovation score of present activity for non-mothers in each 1967 Group is at least twice as great as that of the mothers, and 1967 Role-Innovators with infants are no more Innovative in their present activity than 1967 Traditionals without children. Child rearing, at least in its early stages, is indeed the great leveller. It should also be noted that the first birth interval is calculated for all

Table IV-7. "Do You Feel That Your Working Or Studying Creates Any Stresses Or Benefits For Your Husband?", By 1970 Group

	Innovator		1970 Group Moderate		Traditional		Total	
	N	%	N	%	N	%	N	%
It creates stresses	16	76.2	8	53.3	15	44.1	39	55.7
It creates benefits	21	100.0	14	93.3	34	100.0	69	98.6

Table IV-8a. Kinds Of Stresses Created, By 1970 Group

<u>Stresses</u>	Innovator		1970 Group Moderate		Traditional		Total	
	N	%	N	%	N	%	N	%
I have less time, energy	9	56.3	5	62.5	6	40.0	20	51.3
He has to help with house or children	2	12.5	1	12.5	4	26.6	7	17.9
It creates a competition	3	18.8	0	0.0	0	0.0	3	7.7
He shares my problems	2	12.5	2	25.0	5	33.3	9	23.1
Total	16	100.0	8	100.0	15	99.9	39	100.0

Table IV-8b. Kinds Of Benefits Created, By 1970 Group

<u>Benefits</u>	Innovator		1970 Group Moderate		Traditional		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Financial	10	47.5	11	78.7	24	70.6	45	65.3
I'm happier, more interesting	6	28.6	2	14.2	7	20.6	15	21.7
It's congruent with his values	1	4.8	0	0.0	0	0.0	1	1.4
He's proud of me	1	4.8	1	7.1	0	0.0	2	2.9
I demand less of him	1	4.8	0	0.0	1	2.9	2	2.9
Other	<u>2</u>	<u>9.5</u>	<u>0</u>	<u>0.0</u>	<u>2</u>	<u>5.9</u>	<u>4</u>	<u>5.8</u>
Total	21	100.0	14	100.0	34	100.0	69	100.0

Table IV-9. Mean Role-Innovation Score In 1970, By 1967 Group
And First Birth Interval

<u>1967 Group</u>	<u>First Birth Interval</u>			<u>All Ss</u>
	<u>2 Yrs. Or Less</u>	<u>More Than 2 Yrs.</u>	<u>Open Interval</u>	
Innovators	(1)	(4)	(7)	(10)
$\bar{x}$	36.857	36.200	69.868	61.880
S.D.	35.690	37.200	28.872	33.223
N	7	5	38	50
Moderates	(2)	(5)	(8)	(11)
$\bar{x}$	17.818	1.000	53.353	41.938
S.D.	32.838	0.0	25.839	32.181
N	11	3	34	48
Traditionals	(3)	(6)	(9)	(12)
$\bar{x}$	8.000	10.800	35.881	29.944
S.D.	17.645	11.077	23.591	24.518
N	7	5	42	54

$t_{7,8}=2.5107$ $p<.01$
 $t_{7,9}=5.7164$ $p<.001$
 $t_{8,9}=3.0364$ $p<.005$
 $t_{10,11}=2.9880$ $p<.005$
 $t_{10,12}=5.5528$ $p<.001$
 $t_{11,12}=2.1110$ $p<.025$

pregnancies regardless of outcome: live birth, miscarriage/abortion, infant death, or pregnancy still in progress. So it is interesting to find that pregnancy per se has a significant impact on these women's lives, and that the interval that elapses between marriage and the pregnancy, at least within this limited time frame, does not make much difference.

The detailed pregnancy history of these women by 1970 Group is presented in Tables IV-10 through IV-13. Those who are now engaged in Innovative activity are least likely to have ever been pregnant, most likely of those ever pregnant to have had abortions, least likely to be pregnant now, or to have been pregnant more than once, and therefore, least likely to be a mother now. Only one Innovator and one Moderate are mothers (one child each), and neither wants another child as soon as do the mothers who are less Innovatively occupied.

Child Care

One of the reasons frequently given for the negative relationship between fertility and women's employment, is the difficulty of combining these roles under present institutional arrangements. We asked a number of questions about the kinds of arrangements mothers made for their children, and the most significant finding is that most of them simply arranged to stay home--all the time! Out of twenty-two mothers, only eight responded to the questions about child care, including the two non-Traditional mothers. Given such small numbers, it is hardly worth talking about relationships, but the data are presented in Tables IV-14 through IV-17. Briefly, it appears that the Traditionals get more help from family members, and therefore have a smaller child care bill.

All respondents were asked what they thought would be an ideal arrangement for their children while they were at work or school. Out of 124 who answered this question, the modal response in each group was that they would work or study only when their children were at school, so that they could do all the child care themselves. The other two most frequent responses in each group were to have someone come to their house, and to take the child to a nursery school or child care center. The data are in Table IV-18. Because the ideal arrangement for almost half of the women did not require any help, as they see it, the availability of the arrangement they considered ideal did not affect the decision of whether and when to work after having children for most of them. Yet, more than twenty percent of the Innovators and the Traditionals did feel they might return to work sooner if their ideal arrangement was available at reasonable cost, and another twelve

Table IV-10. Outcome Of First Pregnancy, By 1970 Group

First Pregnancy Ended With:	1970 Group						Total	
	Innovator		Moderate		Traditional			
	N	%	N	%	N	%	N	%
Birth of a daughter	1	33.3	0	0.0	9	36.0	10	34.5
Birth of a son	0	0.0	1	100.0	12	48.0	13	44.8
Miscarriage	0	0.0	0	0.0	2	8.0	2	6.9
Abortion	<u>2</u>	<u>66.7</u>	<u>0</u>	<u>0.0</u>	<u>2</u>	<u>8.0</u>	<u>4</u>	<u>13.8</u>
Total	3	100.0	1	100.0	25	100.0	29	100.0

Table IV-11. "Do You Think You Are Pregnant Now?", By 1970 Group

	1970 Group						Total	
	Innovator		Moderate		Traditional			
	N	%	N	%	N	%	N	%
Yes, I know I am	0	0.0	1	4.0	8	10.0	9	6.1
Yes, I think so	0	0.0	0	0.0	2	2.5	2	1.4
Yes, I might be	1	2.3	0	0.0	0	0.0	1	0.7
No, I doubt it	1	2.3	0	0.0	9	11.3	10	6.8
No, I know I'm not	<u>41</u>	<u>95.3</u>	<u>24</u>	<u>96.0</u>	<u>61</u>	<u>76.3</u>	<u>126</u>	<u>85.1</u>
Total	43	99.9	25	100.0	80	100.1	148	100.1

Table IV-12. Total Number Of Pregnancies, By 1970 Group

Number Of Pregnancies	1970 Group						Total	
	Innovator		Moderate		Traditional			
	N	%	N	%	N	%	N	%
None	42	93.3	23	92.0	52	63.4	117	77.0
One	3	6.7	2	8.0	27	32.9	32	21.1
Two	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0.0</u>	<u>3</u>	<u>3.7</u>	<u>3</u>	<u>2.0</u>
Total	45	100.0	25	100.0	82	100.0	152	100.0

gamma=.72330

Table IV-13. Total Number Of Living Children, By 1970 Group

Number Of Children	1970 Group						Total	
	Innovator		Moderate		Traditional			
	N	%	N	%	N	%	N	%
None	44	97.8	24	96.0	62	75.6	130	85.5
One	<u>1</u>	<u>2.2</u>	<u>1</u>	<u>4.0</u>	<u>20</u>	<u>24.4</u>	<u>22</u>	<u>14.5</u>
Total	45	100.0	25	100.0	82	100.0	152	100.0

Table IV-14. Type Of Child Care Arrangement Using, By 1970 Group

	1970 Group							
	Innovator		Moderate		Traditional		Total	
	N	%	N	%	N	%	N	%
Baby sitter comes to my house	0	0.0	1	100.0	0	0.0	1	12.5
Take child to baby sitters house	1	100.0	0	0.0	2	33.3	3	37.5
Relatives come	0	0.0	0	0.0	1	16.7	1	12.5
Take child to relatives	0	0.0	0	0.0	1	16.7	1	12.5
Father	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0.0</u>	<u>2</u>	<u>33.3</u>	<u>2</u>	<u>25.0</u>
Total	1	100.0	1	100.0	6	100.0	8	100.0

Table IV-15. Number Of Hours Per Week Child Is Cared For By Others, By 1967 Group

<u>Total Number Of Hours</u>	<u>Innovator</u>	<u>Moderate</u>	<u>Traditional</u>	<u>Total</u>
Ten or less hours	0	0	1	1
11-20 hours	0	1	2	3
21-30 hours	0	0	2	2
31-40 hours	<u>1</u>	<u>0</u>	<u>1</u>	<u>2</u>
Total	1	1	6	8
Average Nbr. Hours	40.0	15.0	21.16	22.75

Table IV-16. Cost Per Week Of Child Care, By 1970 Group

<u>Cost Per Week</u>	1970 Group			<u>Total</u>
	<u>Innovator</u>	<u>Moderate</u>	<u>Traditional</u>	
None	0	0	3	3
\$11 - \$15	0	0	1	1
\$16 - \$20	0	1	2	3
\$21 - \$25	<u>1</u>	<u>0</u>	<u>0</u>	<u>1</u>
Total	1	1	6	8
Average Cost	\$23.00	\$18.00	\$8.16	

Table IV-17. "How Would You Rate Your Child Care Arrangement?",
By 1970 Group

<u>Rating</u>	1970 Group			Total	
	<u>Innovator</u>	<u>Moderate</u>	<u>Traditional</u>	<u>N</u>	<u>%</u>
Excellent	1	0	4	5	62.5
Good	0	0	2	2	25.0
Satisfactory	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>12.5</u>
Total	1	1	6	8	100.0

Table IV-18. Ideal Child Care Arrangement, By 1970 Group

<u>Ideal Arrangement</u>	<u>Innovator</u>	<u>1970 Group</u>		<u>Total</u>	
		<u>Moderate</u>	<u>Traditional</u>	<u>N</u>	<u>%</u>
Baby sitter, house-keeper, nurse or nanny would come to my house	10	2	15	27	21.8
I would take them to the baby sitter's/another mother's house	2	1	2	5	4.0
A relative would come to my house	0	0	2	2	1.6
I would take them to a relatives house	0	0	2	2	1.6
A nursery or child care center	6	5	13	24	19.4
Exchange baby sitting with another mother; commune	1	0	2	3	2.4
Friend to baby sit at my home or their home	0	1	0	1	0.8
Children's father would take care of them	2	2	3	7	5.6
They would be old enough to be on their own	0	0	1	1	0.8
I would work or study only when they are at school; at kindergarten	<u>18</u>	<u>9</u>	<u>25</u>	<u>52</u>	<u>41.9</u>
Total	39	20	65	124	100.0
Percent	(46.2)	(45.0)	(38.5)		

to nineteen percent thought they might work more than twenty hours per week under those conditions. These data are in Table IV-19.

All respondents were also asked how they would feel about having their child "attend the kind of center that is available at reasonable cost in Sweden and Denmark, where mothers can have their children supervised by professionally qualified staff in an enriching environment and in small groups, for full or partial days according to the mother's preference?" Fifty-seven percent--considerably more than in the open-ended question about ideal arrangement--said they would very much like to have their child attend such a center, another 34 percent might like it, and only nine percent said they would not or didn't think they would like such an arrangement for their child. There were no group differences. The considerable increase in favorableness toward group care on this question indicates the extent to which the possibility of such good quality group care does not spontaneously enter the picture for most of these women. This is not surprising, since it hardly exists in this country. The availability of this kind of care would have a larger impact on these women's decisions about work than the arrangement they originally indicated as ideal.

The last question on child care asked whether the respondent would like there to be babysitting or a nursery available at their place of work or study. Over a third of each Group said they would like this, and another fifth of the Innovators and Traditionals said they were uncertain, but the modal response by a small margin was "No." Although such an arrangement would seem to have the advantage of convenience over an independent child care center, other issues such as quality, trust, etc. may affect its lower appeal as compared to the "Swedish style" center operated independently. The data are in Table IV-20.

Since such a large part of this sample feels that they or their family should be completely self-reliant with respect to child care, it is interesting to look at their reports of the extent and nature of sharing of household tasks by the other adult member of the household: their husbands. Married women were asked what help their husband gives them with the children or household needs, and what he would help with if she needed the time for studying or for work. (The concept that such tasks are hers, and that he helps her with them, was the product of a pre-liberated consciousness on the part of this investigator. It appears, however, that no-one objected to this wording in 1970.)

Table IV-19. Effect Of Availability Of Ideal Child Care On
Plans To Work, By 1970 Group

If This Arrangement Were Available At Reasonable Cost, I Might:	1970 Group							
	Innovator		Moderate		Traditional		Total	
	N	%	N	%	N	%	N	%
Change my mind about not working after having children	0	0.0	0	0.0	2	2.9	2	1.5
Return to work sooner after having children ¹	11	27.5	2	9.1	15	21.7	28	21.4
Work more than 20 hours per week ²	5	12.5	4	18.2	13	18.8	22	16.8
It would not affect any of these decisions	<u>24</u>	<u>60.0</u>	<u>16</u>	<u>72.7</u>	<u>39</u>	<u>56.5</u>	<u>79</u>	<u>60.3</u>
Total	40	100.0	22	100.0	69	100.0	131	100.0

¹ Of those who would return to work sooner, 41% (9) would start soon after the children were born, 32% (7) when they entered nursery school and 18% (4) when they started kindergarten or first grade.

² Of those who would work more hours, 57% (13) would work full time and another 30% (7) would work between 26 and 35 hours.

Table IV-20. Attitude Toward Having Child Care At Place Of Work
Or Study, By 1970 Group

	1970 Group						Total	
	Innovator		Moderate		Traditional			
	N	%	N	%	N	%	N	%
Yes	15	36.6	9	39.1	25	35.7	49	36.6
Uncertain	8	19.5	2	8.7	14	20.0	24	17.9
No	<u>18</u>	<u>43.9</u>	<u>12</u>	<u>52.2</u>	<u>31</u>	<u>44.3</u>	<u>61</u>	<u>45.5</u>
Total	41	100.0	23	100.0	70	100.0	134	100.0

Table IV-21. Whether Marriage And Motherhood Have Affected Feelings
Toward Work And Studies Or Toward Marriage And Children,
By 1970 Group

	1970 Group						Total
	Innovator		Moderate		Traditional		
	N	%	N	%	N	%	N
Being married has changed my feelings about:							
Marriage/Children	9	42.9	5	35.7	26	46.4	40
Work/Study	12	57.1	3	21.4	29	52.7	44
Having children has changed my feelings about:							
Marriage/Children	1	100.0	1	100.0	14	63.6	16
Work/Study	1	100.0	1	100.0	15	68.2	17

In response to the first, open-ended, question some of the married respondents named one or two things that their husbands do regularly around the house, like dishes, babysitting, vacuuming, and household accounts. To the open-ended question, one fourth made general positive statements without naming anything specifically, only seven percent said that they share everything equally, and almost one fifth said that their husbands do nothing or very little. Husbands were least likely to do ironing, and the next least likely was mopping and waxing floors. The average number of chores done by the husband was 2.6 for the Innovators, 2.8 for the Moderates, and 1.8 for the Traditionals. If ironing can be considered the most sex-typed of the tasks listed, it is surprising to find that Traditionals' husbands are more likely to do it than Innovators' or Moderates'. These are also the husbands, it may be recalled, who are most likely to prefer a daughter. Either the Traditionals' husbands are less stereotyped than we might expect, or, having a Traditional wife permits them to be less defensively rigid in their sex-typing.

What is significant about these data is the extent to which the self-sufficiency of the household in taking care of itself really means the self-sufficiency of the wife-mother. Given these role definitions, it is obvious that the onset of children with the enormous increase of work that involves, drives women out of the labor market and out of advanced training.

We have looked at the behavioral correlates of marriage and child-bearing in terms of their effects on Role-Innovation, and we also wanted to look even briefly, at their impact on the women's feelings towards domestic and non-domestic roles. We looked separately at the effect of marriage and of having children, and the data are presented in Tables IV-21 and 21a. Being married changed their feelings about marriage and children for roughly forty percent of the sample and about work/study for about half of the Innovators and Traditionals but only a fifth of the Moderates. The impact of having children is even greater: both of the Moderate and Innovator mothers feel that both attitudes (marriage/children and work/study) have been affected, and more than sixty percent of the Traditionals feel both attitudes have been affected by having children.

How these feelings have changed is shown in Table IV-21a. Most of the changes in attitudes toward marriage and motherhood are in a positive direction, but substantial negative effects, particularly as a result of marriage, also occurred but only for Moderates and Traditionals. The Innovators' marriages are perhaps more successful from their own point of view.

Table IV-21a. Nature Of Change In Feelings About Working Or Studying And About Marriage Or Children, As A Result Of Being Married And As A Result Of Having Children, By 1970 Group

Type Of Effect On <u>Marriage And Motherhood</u>	<u>Innovator</u>		1970 Group				<u>Total</u>
			<u>Moderate</u>		<u>Traditional</u>		
	<u>Effect Of:</u>						
	<u>Marriage</u>	<u>Being Mother</u>	<u>Marriage</u>	<u>Being Mother</u>	<u>Marriage</u>	<u>Being Mother</u>	
More Realistic	2	1	0	0	4	3	10
More Positive	7	0	3	1	16	8	35
More Negative	0	0	2	0	6	3	11
Type Of Effect On <u>Work/Study</u>							
Less Desire	5	0	0	0	8	8	21
More Desire	2	0	2	1	8	3	16
Easier	1	0	0	0	3	1	5
Harder	2	1	0	0	6	3	12
Greater Financial Needs	2	0	1	0	2	0	5
Change Of Interest	0	0	0	0	2	0	2

Feelings toward work and study have changed mostly in the negative direction as a result of marriage and motherhood. Although some women (most of them Traditionals) report an increase in desire or say that they find it easier to engage in these activities. These are skimpy results at best, and the true impact of acquiring these traditional roles or combining them with other roles, cannot really be assessed from these brief measures. These results can only be considered suggestive of what might be going on.

Work

Many of the questions related to the experience of working were analyzed in Chapters II and III in terms of the aspirations these women had in 1967. Now we will examine these experiences in terms of what they are doing now. About three fourths of the entire sample is now employed, and those presently engaged in Innovative activity are most likely to have never been employed. See Table IV-22. The 1970 Traditionals are less satisfied with their jobs than the other women (Table IV-23), are least interested in being promoted where they now work and are most likely to be in jobs where promotion is not possible. 1970 Innovators are most interested in being promoted, and least likely to prefer different work than they are doing now. See Table IV-24. Of those interested in being promoted, higher proportions of 1970 Innovators and Moderates think their chances are good to excellent. See Table IV-25.

When we analyze the extent to which various aspects of one's occupation provide satisfaction for the respondent, we find some anticipated differences. In Table IV-26, the average satisfaction scores for each Group from each source of satisfaction indicates that the 1970 Innovators get most of their satisfaction from the achievement-related aspects of their work: Demand, Challenge, and Autonomy, and least from the well-heelled quality of the organization. 1970 Moderates get most of their satisfaction from the fact that they work with People rather than things, Challenge, and Pragmatics (practical requirements), and least satisfaction from the Risk involved. Traditionals get most of their satisfaction from the Pragmatic aspects of their job, Autonomy, and Demand. But Traditionals have the lowest overall satisfaction scores of any of the Groups, and Moderates have the highest. It is likely that a higher proportion of the Innovators than of the Moderates are in training jobs or jobs completely unrelated to their ultimate career goal. It is possible that there is some kind of satisfaction which is not covered in this list and that would further or differently differentiate the groups, however, there were few responses to the open-ended form of the question (used

Table IV-22. "Are You Employed Now?", By 1970 Group

	1970 Group							
	Innovator		Moderate		Traditional		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Employed Now	32	71.1	23	92.0	58	70.7	113	74.3
Not Now But Previously	9	20.0	2	8.0	22	26.8	33	21.7
Never Employed	<u>4</u>	<u>8.9</u>	<u>0</u>	<u>0.0</u>	<u>2</u>	<u>2.4</u>	<u>6</u>	<u>3.9</u>
Total	45	100.0	25	100.0	82	100.0	152	100.0

Table IV-23. "Are You Satisfied With Your Job?", By 1970 Group

	1970 Group							
	Innovator		Moderate		Traditional		Total	
<u>Degree Of Satisfaction</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Not at all satisfied	0	0.0	0	0.0	3	5.2	3	2.7
Not very satisfied	2	6.7	2	9.1	6	10.3	10	9.1
Fairly satisfied	14	46.7	6	27.3	29	50.0	49	44.5
Very satisfied	<u>14</u>	<u>46.7</u>	<u>14</u>	<u>63.6</u>	<u>20</u>	<u>34.5</u>	<u>48</u>	<u>43.6</u>
Total	30	100.0	22	100.0	58	100.0	110	100.0

Table IV-24. Interest In Being Promoted At Present Job, By 1970 Group

<u>Interest In Promotion</u>	Innovator		Moderate		1970 Group Traditional		Total	
	N	%	N	%	N	%	N	%
Yes	18	56.3	8	36.4	13	22.4	39	34.8
No	5	15.6	6	27.3	17	29.3	28	25.0
Prefer different work	0	0.0	2	9.1	1	1.7	3	2.7
Does not apply	9	28.1	5	22.7	27	46.6	41	36.6
Would need more education	<u>0</u>	<u>0.0</u>	<u>1</u>	<u>4.5</u>	<u>0</u>	<u>0.0</u>	<u>1</u>	<u>0.9</u>
Total	32	100.0	22	100.0	58	100.0	112	100.0

$$\chi^2=20.277 \quad df=8 \quad p<.005$$

Table IV-25. Chances Of Being Promoted At Present Job, By 1970 Group

<u>Chances Of Promotion</u>	Innovator		Moderate		1970 Group Traditional		Total	
	N	%	N	%	N	%	N	%
Excellent	6	35.3	5	45.5	4	26.7	15	34.9
Good	6	35.3	3	27.3	5	33.3	14	32.6
Fair	0	0.0	0	0.0	3	20.0	3	7.0
Poor	<u>5</u>	<u>29.4</u>	<u>3</u>	<u>27.3</u>	<u>3</u>	<u>20.0</u>	<u>11</u>	<u>25.6</u>
Total	17	100.0	11	100.0	15	100.0	43	100.0

Table IV-26. Sources of Satisfaction With Job. By 1970 Group

Source of Satisfaction	None (0)			Some (1)			A Major Source (2)			Total Wbr Responses & Avg. Score		
	Innovator	Moderate	Traditional	Innovator	Moderate	Traditional	Innovator	Moderate	Traditional	Innovator	Moderate	Traditional
	%	%	%	%	%	%	%	%	%	%	%	%
My job demands a lot from me--not just physically, but espec. in other ways.	0.0	10.0	18.2	25.0	40.0	24.2	75.0	50.0	57.6	16	10	33
There is no one sitting in judgment over me--have to meet my own standards.	10.5	25.0	17.1	36.8	16.7	25.7	52.6	58.3	57.1	19	12	35
Meets basic practical requirements in terms of salary, hours, and/or location.	9.5	8.3	4.9	52.4	16.7	34.1	38.1	75.0	61.0	21	12	41
Unknown aspects--have to risk failure to come up eventually with a success.	28.6	20.0	54.5	42.9	60.0	33.3	28.6	20.0	12.1	14	10	33
I work with people who are intelligent, interesting, sympathetic.	25.0	33.3	20.9	10.0	16.7	30.2	65.0	50.0	48.8	20	12	43
Substantial challenge: have to grow in this job to keep up with it.	0.0	0.0	20.0	33.3	21.4	31.4	66.7	78.6	48.6	18	14	35
The setting is well-organized, fairly well-financed, adequately staffed.	31.3	20.0	32.4	43.8	20.0	32.4	25.0	60.0	35.1	16	10	37
In my job, I work with people rather than things.	33.3	5.3	4.3	27.8	5.3	6.4	38.9	89.5	89.4	18	19	47
Average Score										1.06	1.84	1.09
										1.32	1.49	1.21

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in the Interview) that could not be coded into these categories.

Another possibility is that although an individual is not deriving much satisfaction from a particular aspect of her job, it may either be because she does not like that aspect, or because she is not getting as much as she would like. The second question asked "To what extent do you wish each of the following were more true of your work?" followed by the same list of sources of satisfaction. These results are presented in Table IV-27. The aspects of their work which the 1970 Innovators most want improvement in are those having to do with the practical aspects of their jobs (Pragmatics, Organization). The Moderates most want improvement in their co-workers, the Organization, and more Challenge. The Traditionals most want improvement in their co-workers, the Pragmatic aspects of their work, and the Organization. Thus, only the Moderates want, as a group, a significant increase in the achievement-related aspect of their job. In each Group, the least desire is for more Demand on the job.

Other items also support the interpretation that the 1970 Moderates are the most satisfied with their working situation. They are the least likely to feel that their job is a compromise (Table IV-28) and if it is, the most likely to feel that they will soon have the kind of job they prefer (Table IV-28a), Traditionals are most likely to feel that their present job is a compromise.

A slightly different picture emerges when we ask about the last job of the women who are not now employed. Here it appears that the 1970 Innovators were the most dissatisfied (Table IV-29), the Moderates and Traditionals were most likely to feel it was a compromise (Table IV-30), and of the Traditionals who feel this way, there is not very much optimism about the chances of eventually getting the kind of job they really prefer. (Table IV-30a). These data, however, involve very small numbers of people and no interpretation is really warranted.

As we would expect from the levels of satisfaction expressed above, the 1970 Traditionals are most likely to want another job now (38 percent; Table IV-31), and of those wanting another job now, about forty percent are actually looking for one (Table IV-31a).

Although they appear the least satisfied with the jobs they have, the 1970 Traditionals have also experienced the least discrimination because of sex in getting those jobs: only a fifth of them report having had such difficulties, as compared to over half of the Moderates and over three fifths of the Innovators. Thus, the trade-off appears to be fairly clear: the less satisfying jobs

Table IV-27. Aspects of Job From which More Satisfaction Would Be Desirable, By 1970 Group

	Would Vary Much Like More (2)				More Would Be Nice (1)				Would Not Like More (0)				Total Nbr Responses & Avg. Score				Total Average Score
	Innovator %	Moderate %	Traditional %		Innovator %	Moderate %	Traditional %		Innovator %	Moderate %	Traditional %		Innovator	Moderate	Traditional		
Demand	0.0	12.5	12.0		23.1	25.0	24.0		76.9	62.5	64.0		13	8	25	.46	
Autonomy	0.0	25.0	32.0		50.0	12.5	32.0		50.0	62.5	36.0		.23	.50	.48	.41	
Pragmatics	53.8	0.0	34.6		23.1	75.0	42.3		23.1	25.0	23.1		14	8	25	.47	
Risk	0.0	37.5	14.8		30.8	37.5	37.0		69.2	25.0	48.1		.50	.63	.96	.77	
Co-workers	28.6	77.8	53.8		28.6	0.0	30.8		42.9	22.2	15.4		13	8	27	.48	
Challenge	7.7	50.0	29.2		38.5	25.0	29.2		53.8	25.0	41.7		.31	1.13	.67	.65	
Organization	46.2	62.5	42.9		30.8	12.5	25.0		23.1	25.0	32.1		14	9	26	.49	
Work With People	14.3	25.0	16.7		35.7	25.0	29.2		50.0	50.0	54.2		.86	1.56	1.38	1.27	
Average Score													13	8	24	45	
													.54	1.25	.88	.84	
													13	8	28	49	
													1.23	1.38	1.11	1.18	
													14	8	24	46	
													.64	.75	.63	.65	
													.70	1.00	.91		

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Table IV-28. "Does Your Present Job Represent A Compromise?", By 1970 Group, For Women Presently Employed Only

	1970 Group							
	Innovator		Moderate		Traditional		Total	
	N	%	N	%	N	%	N	%
Yes, it's very much a compromise	6	18.8	1	4.5	11	19.3	18	16.2
Yes, it's a bit of a compromise	11	34.4	4	18.2	27	47.4	42	37.8
No, it does not represent a compromise	15	46.9	17	77.3	19	33.3	51	45.9
Total	32	100.0	22	100.0	57	100.0	111	100.0

$$\chi^2=12.70310 \quad df=4 \quad p<.025$$

Table IV-28a. "Do You Think You Will Someday Have The Kind Of Job You Prefer?", By 1970 Group, For Women Whose Present Job Is A Compromise Only

	1970 Group							
	Innovator		Moderate		Traditional		Total	
	N	%	N	%	N	%	N	%
Yes, I think I will soon have the kind of job I prefer	4	25.0	4	80.0	13	34.2	21	35.6
Perhaps someday I will have the kind of job I prefer	10	62.5	0	0.0	20	52.6	30	50.8
No, I will probably never have the kind of job I prefer	2	12.5	1	20.0	5	13.2	8	13.6
Total	16	100.0	5	100.0	38	100.0	59	100.0

Table IV-29. "Were You Satisfied With Your Last Job?", By 1970 Group,
For Women Who Have Worked But Are Not Presently Employed

	Innovator		Moderate		Traditional		Total	
	N	%	N	%	N	%	N	%
Not at all satisfied	4	44.4	0	0.0	3	13.6	7	20.6
Not very satisfied	2	22.2	1	33.3	5	22.7	8	23.5
Fairly satisfied	2	22.2	2	66.7	10	45.5	14	41.2
Very satisfied	<u>1</u>	<u>11.1</u>	<u>0</u>	<u>0.0</u>	<u>4</u>	<u>18.2</u>	<u>5</u>	<u>14.7</u>
Total	9	100.0	3	100.0	22	100.0	34	100.0

Table IV-30. "Did Your Last Job Represent A Compromise?", By 1970 Group,
For Women Who Have Worked But Are Not Presently Employed

	Innovator		Moderate		Traditional		Total	
	N	%	N	%	N	%	N	%
Yes, it was very much a compromise	3	33.3	2	66.7	6	27.3	11	32.4
Yes, it was a bit of a compromise	1	11.1	1	33.3	8	36.4	10	29.4
No, it did not represent a compromise	<u>5</u>	<u>55.6</u>	<u>0</u>	<u>0.0</u>	<u>8</u>	<u>36.4</u>	<u>13</u>	<u>38.2</u>
Total	9	100.0	3	100.0	22	100.0	34	100.0

Table IV-30a. "Do You Think You Will Someday Have The Kind of Job You Prefer?", By 1970 Group, For Women Whose Last Job Was A Compromise And Are Not Now Working

	Innovator		Moderate		Traditional		Total	
	N	%	N	%	N	%	N	%
Yes, I think I will soon have the job I prefer	2	50.0	1	33.3	2	14.3	5	23.8
Perhaps someday I will have the job I prefer	1	25.0	1	33.3	8	57.1	10	47.6
No, I will probably never have the job I prefer	<u>1</u>	<u>25.0</u>	<u>1</u>	<u>33.3</u>	<u>4</u>	<u>28.6</u>	<u>6</u>	<u>28.6</u>
Total	4	100.0	3	100.0	14	100.0	21	100.0

Table IV-31. "Would You Like Another Job Now?", By 1970 Group

	Innovator		Moderate		Traditional		Total	
	N	%	N	%	N	%	N	%
Yes	9	22.0	4	16.7	31	37.8	44	29.9
No	<u>32</u>	<u>78.0</u>	<u>20</u>	<u>83.3</u>	<u>51</u>	<u>62.2</u>	<u>103</u>	<u>20.1</u>
Total	41	100.0	24	100.0	82	100.0	147	100.0

Table IV-31a. "Are You Looking For Another Job Now?", By 1970 Group, For Women Who Would Like Another Job Now

	Innovator		Moderate		Traditional		Total	
	N	%	N	%	N	%	N	%
Yes	4	44.4	0	0.0	13	43.3	17	39.5
No	<u>5</u>	<u>55.6</u>	<u>4</u>	<u>100.0</u>	<u>17</u>	<u>56.7</u>	<u>26</u>	<u>60.5</u>
Total	9	100.0	4	100.0	30	100.0	43	100.0

are easier to get. What should be remembered is that this is true even though most of these women, including the Traditionals, are doing roughly what they set out to do when they graduated from college. The data on sex discrimination by 1970 Group is presented in Table IV-32.

Education

The choice of activity immediately following graduation from college, does not seem to be associated with the innovativeness of the present activity. When the women are classified as Innovators, Moderates, or Traditionals on the basis of their present activity there is no difference between them in the proportion that started Graduate School immediately (a little over half in each group), or worked for a while first (about forty percent in each group), or travelled first (less than five percent in each group). These data are in Table IV-33.

Among those now in school, the pattern of dissatisfaction appearing in the items about work, reappear in questions related to advanced studies. Of the women now pursuing graduate studies, almost sixty percent of those reporting that their present field of study is a compromise are 1970 Traditionals. However, they are more optimistic than the Innovators, and less optimistic than the Moderates about their eventually being able to study their preferred subject (Table IV-34).

Although these Traditional women were least likely to report experiencing sex discrimination in the job market, they are somewhat more likely than Innovators to believe that women in general have special difficulties in pursuing further education. It may be that much of this response comes from the "temporarily" Traditional segment of this group. These data are in Table IV-35. They are least likely of all the groups to report that one of the difficulties is that "very bright women worry about outshining male colleagues", or other kinds of internal barriers. This group is also least likely to feel that women in general have certain advantages in pursuing further education (Table IV-36). Even the respondents who do think that women have some advantages, seldom think that these outweigh the disadvantages that women face. (Table IV-36a). In terms of personal experience, however, it is again the Innovators who lead in reporting such difficulties, although they still are less than a third of the Innovators in the sample (Table IV-37).

At the end of the section of the Interview or Questionnaire dealing with present activities, each respondent was asked the extent to which the following statement was true for her: "I want

Table IV-32. Incidence Of Personal Experience With Difficulties In Work, By 1970 Group

<u>1970 Group</u>		<u>Yes</u>	<u>No</u>	<u>Total</u>
Innovator	N	19	26	45
	%	42.2		100.0
Moderate	N	13	12	25
	%	52.0		100.0
Traditional	N	17	64	81
	%	<u>21.0</u>		<u>100.0</u>
Total		49	102	151
Percent		32.4		100.0

$$\chi^2 = 12.04820 \quad df=4 \quad p < .025$$

Table IV-33. "Did You Start Further Studies Directly After Finishing Your B.A.?", By 1970 Group, For Those Who Have Attended School Since 1967

<u>1970 Group</u>		<u>Yes</u>	<u>No, Worked First</u>	<u>No, Travelled First</u>	<u>Total</u>
Innovator	N	20	14	1	35
	%	57.1	40.0	2.9	100.0
Moderate	N	14	8	0	22
	%	63.6	36.4	0.0	100.0
Traditional	N	29	25	1	55
	%	<u>52.7</u>	<u>45.5</u>	<u>1.8</u>	<u>100.0</u>
Total		63	47	2	112
Percent		56.3	42.0	1.8	100.0

Table IV-34. "Do You Think You Will Someday Be Able To Study What You Really Prefer?" (1970), By 1970 Group, For Those Whose Present Studies Represent A Compromise

<u>1970 Group</u>		<u>Yes</u>	<u>Perhaps</u>	<u>No</u>	<u>Total</u>
Innovator	N	2	3	4	9
	%	22.2	33.3	44.4	99.9
Moderate	N	2	3	1	6
	%	33.3	50.0	16.7	100.0
Traditional	N	6	9	6	21
	%	<u>28.6</u>	<u>42.9</u>	<u>28.6</u>	<u>100.1</u>
Total		10	15	11	36

Table IV-35. Whether Women In General Are Believed To Have Special
Difficulties In Pursuing Further Education, By 1970 Group

<u>1970 Group</u>		<u>Yes</u>	<u>No</u>	<u>Total</u>
Innovator	N	29	16	45
	%	64.4	35.6	100.0
Moderate	N	18	7	25
	%	72.0	28.0	100.0
Traditional	N	55	26	81
	%	<u>67.9</u>	<u>32.1</u>	<u>100.0</u>
Total		102	49	151

Table IV-36. Whether Women In General Are Believed To Have Special
Advantages In Pursuing Further Education, By 1970 Group

<u>1970 Group</u>		<u>Yes</u>	<u>In Female Dominated Fields Only</u>	<u>No</u>	<u>Total</u>
Innovator	N	9	5	31	45
	%	20.0	11.1	68.9	100.0
Moderate	N	6	5	14	25
	%	24.0	20.0	56.0	100.0
Traditional	N	23	15	43	81
	%	<u>28.4</u>	<u>18.5</u>	<u>53.1</u>	<u>100.0</u>
Total		38	25	88	151
Percent		25.2	16.6	58.3	100.0

Table IV-36a. Whether Women's Advantages Outweigh Their Difficulties
In Pursuing Further Education, By 1970 Group

<u>1970 Group</u>		<u>Advantages Greater</u>	<u>They Balance Out</u>	<u>Difficulties Greater</u>	<u>Total</u>
Innovator	N	2	3	5	10
	%	20.0	30.0	50.0	100.0
Moderate	N	1	1	7	9
	%	11.1	11.1	77.8	100.0
Traditional	N	4	13	15	32
	%	<u>12.5</u>	<u>40.6</u>	<u>46.9</u>	<u>100.0</u>
Total		7	17	27	51
Percent		13.7	33.3	52.9	100.0

Table IV-37. Incidence Of Personal Experience With Difficulties In
Pursuing Further Education, By 1970 Group

<u>1970 Group</u>		<u>Yes</u>	<u>No</u>	<u>Total</u>
Innovator	N	14	31	45
	%	31.1	68.9	100.0
Moderate	N	2	23	25
	%	8.0	92.0	100.0
Traditional	N	9	73	82
	%	<u>11.0</u>	<u>89.0</u>	<u>100.0</u>
Total		25	127	152
Percent		16.4	83.6	100.0

$$\chi^2=10.12586 \quad df=2 \quad p<.01$$

and intend to have a career; my husband will have to take that for granted and adjust accordingly." This can be viewed as a summary statement of each woman's commitment to a career. The data on this item appear in Table IV-38, and indicate that even among the 1970 Innovators, for whom all other signs point toward a life pattern of fairly continuous employment, there is resistance to stating outright that this is what they want to do: less than a third say this is very true of them and another third say it is somewhat true. In fact, as compared to sixty percent of the Innovators giving these two responses, three fourths of the Moderates give these responses! The Traditionals, not unexpectedly, are least likely to endorse this statement.

Multiple Regression Analysis of 1970 Role-Innovation

Several regression analyses were performed to sort out the relative strength of various predictors of Role-Innovation in 1970. The first regressions run showed that by far the strongest predictors of present Role-Innovation were the occupational aspiration set in 1967 or the First Birth Interval (negatively), whichever was used. The next strongest predictor was marital status, with strongest attachment associated with lowest Innovation. The third best predictor was the women's anticipated timing of return to work after having children (1970), the fourth was Motive to Avoid Success (positively related to Role-Innovation),

and the fifth was Wife's Demand (1967) (positively related to Innovation). It is notable that Wife's Demand and Husband's Demand maintain their opposite relationships to the 1970 Innovation variable which was obtained for 1967 aspiration, Wife's Demand being positively related and Husband's Demand being negatively related to Innovation, and in this case, both predictors are statistically significant.

Additional regressions were performed with the following variations. All of these were step-wise regressions which enter variables into the regression equation in order of the largest F values. The occupational aspiration in 1967 was dropped. Also, in place of entering Wife's Demand and Husband's Demand, four variables were constructed each representing one combination of the two dichotomized variables (High Wife Demand-High Husband Demand, High Wife Demand-Low Husband Demand, Low Wife-Low Husband Demand, and Low Wife-High Husband Demand). Separate regressions were run with each of these Demand combinations. The first combination (High-High) is the generalization pattern in which a woman projects high demands both for herself and her husband, the last combination (Low-High) is the displacement pattern in which a woman projects high demand for her husband, but less demand for herself. The displacement pattern was found to be more typical of

Table IV-38. "I Want And Intend To Have A Career...", By 1970 Group

<u>1970 Group</u>		<u>Not True</u>	<u>Not Very True</u>	<u>Somewhat True</u>	<u>Very True</u>	<u>Total</u>
Innovator	N	9	9	13	14	45
	%	20.0	20.0	28.9	31.1	100.0
Moderate	N	4	2	12	7	25
	%	16.0	8.0	48.0	28.0	100.0
Traditional	N	27	21	21	13	82
	%	<u>32.9</u>	<u>25.6</u>	<u>25.6</u>	<u>15.9</u>	<u>100.0</u>
Total		40	32	46	34	152
Percent		26.3	21.1	30.3	22.4	100.0

$$x^2=12.57233 \quad df=6 \quad p \text{ almost } .05$$

the 1967 Traditionals in the initial study, and the generalization pattern more typical of the Innovators. In the follow-up sample, the Low-Low pattern is the most common pattern and the Displacement pattern is the most rare. In spite of this rarity, the Displacement variable is the fourth variable to be entered in the step-wise regression, with the predicted negative relationship to present Innovation. It is outranked by the 1970 Commitment Index, then Marital Status, and then Advancement (i.e., the importance assigned in 1967 to opportunities for advancement as a reason for choosing one's occupation: one of the extrinsic achievement variables). These data are in Table IV-39. The other Demand variable which shows similar strength is the High Wife Demand-Low Husband Demand combination, which is positively related to present Innovation. Both these findings confirm the conclusions from the initial study that these are fairly powerful motivational measures for predicting women's Role-Innovation.

Table IV-39. Stepwise Multiple Regression Analysis of 1970 Role-Innovation

Step Entered	Predictor	Beta Coefficient	F	df	p	Multiple R
1	1970 Commitment Index	6.66859	17.544	1,150	<.01	.3236
2	Marital Status ('70) ^a	-5.18729	13.116	2,149	<.01	.3869
3	Importance of Advancement ('67)	5.74018	9.896	3,148	<.01	.4087
4	Displaced Demand ('67)	-14.63213	7.962	4,147	<.01	.4220
5	Would Like To Be A Leader ('67)	4.79520	6.932	5,146	<.01	.4380
6	Would Like To Be Famous ('67)	-2.67892	6.038	6,145	<.01	.4471
7	Future Work Excellence ('67)	-2.22007	5.394	7,144	<.01	.4558
8	When Return To Work After Children ('70)	2.48600	4.872	8,143	<.01	.4628
9	Mother's Employment Index ('67)	- .56500	4.383	9,142	<.01	.4663
10	1967 Commitment Index	- .80299	3.967	10,141	<.01	.4686
11	Fertility Risk-Taking Index ('70)	-1.24208	3.628	11,140	<.01	.4710
12	Mate's Attitude Toward Wife's Career ('70)	- .62299	3.323	12,139	<.01	.4721
13	Importance of Salary ('67)	- .81649	3.054	13,138	<.01	.4727
14	Importance of Leadership (67)	.38804	2.817	14,137	<.01	.4728

^aMarried=1, Engaged=2, Going Steady=3, Not Attached=4

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CHAPTER V

Factors Associated with Change in Role-Innovation from Aspirations in 1967 to Present Activity in 1970

Previous chapters focussed on the analysis of factors associated with either previous aspirations, or present activity. In spite of some general shifts, there is a fairly good correlation between these (Spearman $\rho = .40$, $p < .001$) and there was therefore a great deal of overlapping results. In this chapter, we will focus on the amount and direction of change which has occurred in the three year interval, and the factors which are associated with change. An Innovation Change Score was calculated for each respondent by taking the difference between the Role-Innovation score of her aspirations in 1967 and her present major activity in 1970. The distribution of these differences was collapsed into fifteen ten-point intervals: The middle category of no change is represented by the value 6. The overall sample mean of 7.191 represents an average change score in the Traditional direction. For some analyses, this was further collapsed into three categories, Increased Innovation, No Change, and Decreased Innovation (or Increased Traditionality). The kinds of change which took place in each of the original criterion groups are shown in Table V-1. About two fifths of the sample did not change, another two fifths became more Traditional, and the remaining one fifth became more Innovative than they were in 1967. 1967 Innovators and Traditionals were most likely not to change, but Moderates were more likely to become more Traditional. Almost two fifths of the original Traditionals became more Innovative, and more than one fifth of the Moderates. The first of the relationships to Change in Role-Innovation which we examine next are those arising from the domestic situation of the women.

Marriage, Male Attitudes, and Conflict

Several analyses were done to examine the relationships between marital status, husband's attitude, the woman's own feelings of conflict, and the change in her Role-Innovation. Because the frequencies for a given combination of statuses on a number of variables is sometimes quite small, interpretations can only be tentative.

In Tables V-2 and 3 are presented the relationships between original aspiration group, present marital status, and change in

Table V-1. 1967-70 Change Score Group, By 1967 Group

1967 Group	More Innovative (-10 to -99)		No Change (-9 to +9)		More Traditional (10 to 99)		Total
	N	%	N	%	N	%	
Innovator	2	5.9	24	40.0	24	41.4	50
	4.0		48.0		48.0		100.0
Moderate	11	32.4	11	18.3	26	44.8	48
	22.9		22.9		54.2		100.0
Traditional	21	61.7	25	41.7	8	13.8	54
	38.9		46.3		14.8		100.0
Total	34	100.0	60	100.0	58	100.0	152
Percent	22.4		39.4		38.2		100.0

$\chi^2=31.23254$ df=4 p<.001

Table V-2. Average Change Score¹ By 1967 Group And Marital Status

<u>1967 Group</u>	<u>Marital Status</u>				<u>All Statuses</u>
	<u>Married</u>	<u>Engaged</u>	<u>Going Steady</u>	<u>Single</u>	
Innovator	(1)	(4)	(7)	(10)	(13)
$\bar{x}$	9.464	7.333	7.833	6.308	8.320
S.D.	3.677	2.082	3.764	2.136	3.478
N	28	3	6	13	50
Moderate	(2)	(5)	(8)	(11)	(14)
$\bar{x}$	9.133	5.667	6.143	7.625	8.229
S.D.	3.627	3.512	3.237	3.068	3.610
N	30	3	7	8	48
Traditional	(3)	(6)	(9)	(12)	(15)
$\bar{x}$	5.457	4.667	4.250	5.000	5.222
S.D.	2.513	2.887	1.258	2.629	2.455
N	35	3	4	12	54
All 1967 Groups	(16)	(17)	(18)	(19)	
$\bar{x}$	7.849	5.889	6.294	6.152	7.191
S.D.	3.736	2.759	3.255	2.682	3.500
N	93	9	17	33	152

$t_{1,3}=5.0459$ $p<.001$
 $t_{2,3}=4.7322$ $p<.001$
 $t_{11,12}=1.9404$ $p<.05$
 $t_{16,19}=2.3827$ $p<.01$
 $t_{13,15}=5.2286$ $p<.001$
 $t_{14,15}=4.9198$ $p<.001$

¹The distribution of change scores was collapsed into fifteen ten-point intervals. The middle category of no change is 6.0.

Table V-3. Change Group, By Marital Status

<u>Marital Status</u>		More Innovative		No Change		More Traditional		Total	
		N	%	N	%	N	%	N	%
Married	N	16		37		40		93	
	%		17.2		39.8		43.0		100.0
Engaged	N	3		2		4		9	
	%		33.3		22.2		44.4		100.0
Going Steady	N	6		7		4		17	
	%		35.3		41.2		23.5		100.0
Unattached	N	9		14		10		33	
	%		27.3		42.4		30.3		100.0
Total		34		60		58		152	
Percent			22.4		39.5		38.2		100.0

Table V-4. Change Group, By Man's Attitude Toward Wife Having A Career

<u>Man's Attitude-Career</u>		More Innovative		No Change		More Traditional		Total	
		N	%	N	%	N	%	N	%
(2) Like It	N	11	50.0	25	61.0	22	47.8	58	47.8
	%		19.0		43.1		37.9		100.0
(1) OK, Probs/Not Matter	N	10	45.0	12	29.3	19	41.3	41	33.9
	%		24.4		29.3		46.3		100.0
(0) Not Like It	N	1	5.0	4	9.8	5	10.9	10	8.3
	%		10.0		40.0		50.0		100.0
Total		22	100.0	41	100.1	46	100.0	121	100.0
Average Man's Favorability		1.454		1.524		1.370			

Innovation. Obviously, married women have the highest average change score that is, they changed more than the others in the direction of greater Traditionality. This is true within each of the original Groups, but the impact of marital status is greatest among the Innovators, least among the Traditionals. Of the married women, only 17 percent became more Innovative, as compared to roughly 30 percent of the unmarried women. The women least committed to a particular relationship were also the least likely to have become more Traditional (Table V-3).

The impact of marriage was further defined by specifying the husband's attitude toward his wife's having a career, as reported by the woman. Men were not interviewed. The man's attitude was classified as favorable, neutral, or unfavorable. The response "It would be all right with him--although he would feel it might cause some problems" was classified as neutral because it contains both weak positive and weak negative elements. Women who were engaged or going steady were also included in this question. The relationship between this attitude and change in Role-Innovation is shown in Table V-4. Although half of the men are reported as being favorable and another third as neutral, there is still a weak but clear relationship between this attitude and change in Innovation. Women whose men had positive or neutral attitudes were twice as likely to become more Innovative than those with negative attitudes, and half of the latter became more Traditional as compared to about forty percent of the former. Thus, it appears that there is some effect. It may be that the inclusion on this particular question of engaged women and those going steady enough to answer these questions, weakens the relationship.

It was also considered possible that the negative effects of one's mate's attitudes on one's behavior might be less at this relatively early stage of the relationship (married or otherwise) than it would be later. The more immediate effect might be stronger on the amount of conflict a woman feels about combining a career with traditional roles. On the other hand, conflict which preceded mating might determine both the kind of mate one chooses (in terms of his attitude on this question) and the change in Role-Innovation.

The first set of interactions examined were the effects of Motive to Avoid Success, Marital Status, and Husband's Attitude, on change in Role-Innovation. The Motive to Avoid Success can, in part, be considered a measure of conflict since it represents a tendency counter to approaching success in women who are achievement motivated. Contrary to expectations, the data in Table V-5 suggest that Motive to Avoid Success is not associated with greater increases in Traditionality than is true for the

Table V-5. Mean Change In Role-Innovation Score¹ (1967-70), By Motive To Avoid Success, Marital Status, And Man's Attitude Toward Wife Having A Career

Marital Status - Husband's Attitude	Motive To Avoid Success							
	None (1)		Some (2)		High (3)		No Data	
	$\bar{x}$	N	$\bar{x}$	N	$\bar{x}$	N	$\bar{x}$	N
Married	9.105	19	7.000	22	7.600	20	7.844	32
Favorable	9.300	10	8.429	7	6.154	13	5.846	13
Neutral	9.000	6	6.000	11	12.000	5	8.438	16
Unfavorable	10.000	2	7.500	2	6.000	2	13.333	3
No Data	6.000	1	7.000	2	-		-	
Engaged	9.000	1	4.333	3	6.667	3	5.500	2
Favorable	9.000	1	-		5.500	2	5.000	1
Neutral	-		-		9.000	1	6.000	1
Unfavorable	-		4.333	3	-		-	
No Data	-		-		-		-	
Going Steady	8.000	3	8.000	5	5.000	2	4.714	7
Favorable	14.000	1	-		-		5.667	3
Neutral	-		-		-		3.000	1
Unfavorable	4.000	1	8.000	3	5.000	1	-	
No Data	6.000	1	8.000	2	5.000	1	4.333	3
None Of The Above	7.500	6	5.000	5	5.000	4	6.278	18
All Respondents	8.655	29	6.629	35	6.966	29	6.915	59
S.D.	3.568		2.911		3.620		3.616	

All Respondents $t_{1,2}=2.4662$ $p<.01$ $t_{1,3}=1.7612$ $p<.05$

¹A larger mean change in Role-Innovation score means change in a more Traditional direction; the smaller the mean, the less Traditional the direction of change. A mean of 6 indicates no change; a mean of 5 or less indicates change to a more Innovative activity than in 1967.

sample as a whole. In fact, it appears that the opposite may be true, both for the sample as a whole and for each marital status. Nor does the man's attitude appear to affect the change in Role-Innovation within levels of Motive to Avoid Success.

Using a more direct measure of conflict--the woman's own statement in 1967 of feeling conflict between marriage and career--it appears in Table V-6 that for married and engaged women, greater conflict in 1967 is associated with increasing Traditionality. This does not appear to be as clearly true of the unattached women. Within each conflict category, favorable attitudes on the part of one's husband or fiancé are associated with less increase in Traditionality. It is interesting that women who said in 1967 that they wanted both a career and marriage but felt no conflict between them became much more Traditional than the women who said at that time that they wanted no career, and this is most true among those who have married. It suggests that the former may have reduced the possibility of conflict by lowering their level of aspiration, a resolution not required by those not aspiring to careers in the first place. From the last row of the Table, it appears that those feeling strong conflict in 1967 have changed the most in the Traditional direction. The only women who changed in the opposite direction (change scores less than 6.0) are those who were not interested in marriage to begin with--although if anything, greater marital commitment seems to raise rather than lower this group's Innovation score.

The same question about conflict between marriage and a career when asked in 1970 also produces the same tendency for greater conflict to be associated with more Traditional change, although it is not consistent across marital statuses and is weak even where true. More of the women report conflict now than did before, in every marital status. The man's attitude does not appear to make a difference in change score except for the married women who feel no conflict because they want no career. For these women, husband's unfavorable attitude is associated with a greater increase in Traditionality. These data are in Table V-7.

By extracting from Table V-7 two subtables each of which collapses one of the row variables, and looking at the frequencies only, one pattern does emerge. Although in Table V-7a there is no consistent relationship between degree of attachment and the proportion reporting no conflict, in Table V-7b, there emerges the following pattern. Women whose men have favorable attitudes towards their having a career are most likely to say they feel no conflict and least likely to say they don't want a career. "Neutral" attitudes on the man's part increases the reports of conflict and of not wanting a career. With disapproving mates

Table V-6. Mean Change In Role-Innovation Score¹ (1967-70), By Conflict Expressed In 1967 (Between Marriage And Career), Marital Status, And Man's Attitude Toward Wife Having A Career

Marital Status - Man's Attitude	Column	Amount Conflict Felt In 1967									
		Strong Conflict		Some Conflict		Want Both:		No Career		No Marriage	
		$\bar{X}$	N	$\bar{X}$	N	No Conflict	N	$\bar{X}$	N	$\bar{X}$	N
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Married		9.500	4	8.214	14	8.490	49	6.240	25	5.000	1
Favorable		9.000	2	6.500	4	8.360	25	4.545	11	5.000	1
Neutral		10.000	2	8.444	9	8.500	18	7.333	9	-	-
Unfavorable		-	-	13.000	1	10.000	4	8.500	4	-	-
No Data		-	-	-	-	7.000	2	6.000	1	-	-
Engaged		-	-	8.000	1	5.800	5	-	-	5.333	3
Favorable		-	-	8.000	1	5.750	4	-	-	3.500	2
Neutral		-	-	-	-	6.000	1	-	-	9.000	1
Unfavorable		-	-	-	-	-	-	-	-	-	-
No Data		-	-	-	-	-	-	-	-	-	-
Going Steady		-	-	5.500	2	6.429	14	6.000	1	-	-
Favorable		-	-	5.500	2	8.600	5	6.000	1	-	-
Neutral		-	-	-	-	3.000	1	-	-	-	-
Unfavorable		-	-	-	-	4.000	1	-	-	-	-
No Data		-	-	-	-	5.714	7	-	-	-	-
Single		6.333	3	5.200	10	6.667	18	4.000	1	8.000	1
All Respondents		8.143	7	6.889	27	7.616	86	6.148	27	5.800	5
S.D.		3.437		3.309		3.608		3.359		2.775	
		$t_{3,4}=1.8596 \quad p<.05$									

- 1 A larger mean change in Role-Innovation score indicates change in a more Traditional direction.
 A Mean of 6 indicates no change; a mean of 5 or less indicates change to a more Innovative activity than was expected in 1967.

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Table V-6a. Conflict Felt In 1967 By Marital Status (1970)

Marital Status	Amount Of Conflict Felt In 1967							
	Strong Conflict		Some Conflict		Want Both:		No Marriage	
	N	%	N	%	No Conflict	No Career	N	%
Married	4	4.2	14	15.2	49	52.2	1	1.1
Engaged	0	0.0	1	11.1	5	55.6	3	33.3
Going Steady	0	0.0	2	11.8	14	82.3	0	0.0
Single	3	9.1	10	30.3	18	54.6	1	3.0
							33	100.0
							152	

Table V-6b. Conflict Felt In 1967 By Man's Attitude Toward Wife Having A Career (1970), For Attached Women Only

Man's Attitude	Attached Women Only							
	Strong Conflict		Some Conflict		Want Both:		No Marriage	
	N	%	N	%	No Conflict	No Career	N	%
Favorable	2	3.4	7	12.1	34	58.6	12	20.7
Neutral	2	4.9	9	22.0	20	48.8	9	22.0
Unfavorable	0	0.0	1	10.0	5	50.0	4	40.0
							0	0.0
							58	100.0
							41	100.1
							10	100.0
							109	

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Table V-7. Mean Change In Role-Innovation Score (1967-70), By Conflict Expressed In 1970 (Between Marriage And Career), Marital Status, And Man's Attitude Toward Wife Having A Career

Marital Status - Man's Attitude	Column	Amount Of Conflict Felt In 1970									
		Strong Conflict		Some Conflict		Want Both:		No Career		No Marriage	
		$\bar{x}$	N	$\bar{x}$	N	$\bar{x}$	N	$\bar{x}$	N	$\bar{x}$	N
		(1)		(2)		(3)		(4)		(5)	
Married		14.000	2	8.000	27	7.075	40	8.478	23	-	-
Favorable		15.000	1	7.000	12	7.000	29	6.000	1	-	-
Neutral		13.000	1	9.000	14	7.400	10	7.846	13	-	-
Unfavorable		-	-	6.000	1	6.000	1	10.714	7	-	-
No Data		-	-	-	-	-	-	6.000	2	-	-
Engaged		-	-	2.667	3	7.200	5	9.000	1	-	-
Favorable		-	-	2.667	3	7.500	4	-	-	-	-
Neutral		-	-	-	-	6.000	1	9.000	1	-	-
Unfavorable		-	-	-	-	-	-	-	-	-	-
No Data		-	-	-	-	-	-	-	-	-	-
Going Steady		-	-	9.000	4	5.500	10	5.333	3	-	-
Favorable		-	-	9.500	2	7.000	5	6.000	1	-	-
Neutral		-	-	-	-	3.000	1	-	-	-	-
Unfavorable		-	-	-	-	-	-	4.000	1	-	-
No Data		-	-	8.500	2	4.250	4	6.000	1	-	-
Single		-	-	6.188	16	6.000	16	-	-	8.000	1
No Data		8.000	1	-	-	-	-	-	-	-	-
All Respondents		14.000	2	7.180	50	6.620	71	8.148	27	8.000	1
S.D.		1.414	-	3.409	-	3.486	-	3.313	-	-	-

$t_{3,4}=1.9474$ $p<.05$

Table V-7a. Conflict Felt In 1970 By Marital Status (1970)

Marital Status	Strong		Some		None		No Career		No Marriage		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Married	2	2.2	27	29.3	40	43.5	23	25.0	0	0.0	92	100.0
Engaged	0	0.0	3	33.3	5	55.6	1	11.1	0	0.0	9	100.0
Going Steady	0	0.0	4	23.5	10	58.8	3	17.6	0	0.0	17	100.0
Single	0	0.0	16	48.5	16	48.5	0	0.0	1	3.0	33	100.0
Total	2		50		71		27		1		151	

Table V-7b. Conflict Felt In 1970 By Man's Attitude Toward Wife Having A Career (1970), For Attached Women Only

Man's Attitude Toward Wife Having A Career	Strong		Some		None		No Career		No Marriage		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Favorable	1	1.72	17	29.3	38	65.5	2	3.4	0	0.0	58	100.0
Neutral	1	2.43	14	34.1	12	29.3	14	34.1	0	0.0	41	100.0
Unfavorable	0	0.0	1	10.0	1	10.0	8	80.0	0	0.0	10	100.0
	2	1.8	32	29.4	51	46.8	24	22.0	0	0.0	109	100.0

women are most likely to simply report not wanting a career altogether.

It seems plausible to interpret these results as indicating that at this early stage of the marriage, being married--aside from maternity--and husband's attitude affect the woman's Role-Innovation only slightly. However, both marital status and particularly the mate's attitude do affect the woman's feelings of conflict. Once the husband's own economic position is more firmly established these feelings may be more clearly expressed in her occupational behavior.

In terms of change in conflict, this can be easily seen by comparing Tables V-6a and 6b (which show the conflict felt in 1967) with Tables V-7a and 7b (which show the conflict felt in 1970). In this comparison, summarized in Tables V-8a and 8b, the following shifts in reported conflict occur: although all the women increased their reports of conflict, the least increase occurs among the unattached women. The married women report less rejection of marriage, less rejection of a career, more conflict, and less feeling that wanting both is without conflict. The women who are engaged and going steady decrease their reports that wanting both is without conflict, but increase their rejection of a career as well as their reports of conflict. The shift among the unattached women is all toward increased career commitment and increased conflict.

For the attached women, their men's attitudes clearly differentiates the kinds of changes in conflict which occur. With favorable attitudes, women's reports shift from rejecting either marriage or career to wanting both and mostly feeling conflict about it. With neutral attitudes, the women shift from reporting no conflict about wanting both to either rejecting a career or reporting conflict about it. With unfavorable attitudes, although the number is small, the shift is entirely from feeling no conflict about wanting both to rejecting the career goal entirely.

The rather unexpected result then, is that the man's attitude toward the woman's having a career seems to act as a filter on her report of which goals she sets for herself, thus setting the stage for either experiencing conflict over wanting a career, or "eliminating" (denying?) the conflict by surrendering the career goal. It is for this reason that we end up with the rather paradoxical finding that more favorable attitudes on the man's part towards her having a career tend to increase the woman's expression of conflict over wanting a career!

Table V-8a. Change In Proportions Expressing Conflict (1967-70),
By Marital Status (In Percentage Points)

<u>Marital Status</u>	<u>Yes Conflict</u>	<u>No Conflict</u>	<u>No Career</u>	<u>No Marriage</u>	<u>N</u>
Married	+12.0	- 8.7	- 2.2	- 1.1	92
Engaged	+22.2	0.0	+11.1	-33.3	9
Going Steady	+11.7	-23.4	+11.7	0.0	17
Unattached	+ 9.0	- 6.0	- 3.0	0.0	<u>33</u>
					152

Table V-8b. Change In Proportions Expressing Conflict (1967-70), By Man's
Attitude Toward Wife Having A Career (In Percentage Points)

<u>Man's Attitude</u>	<u>Yes Conflict</u>	<u>No Conflict</u>	<u>No Career</u>	<u>No Marriage</u>	<u>N</u>
Favorable	+5.5	+ 6.9	-17.3	-5.2	58
Neutral	+9.6	-19.5	+12.1	-2.4	41
Unfavorable	0.0	-40.0	+40.0	0.0	<u>10</u>
					109

Maternity and Conflict

We have noted before the overwhelming impact of maternity on women's present activity. Only two of the mothers can be presently classified as engaged in non-traditional activity. It may seem, therefore, a bit belabored to re-examine the role of motherhood in terms of change in Role-Innovation. However, it does appear important to find out whether this change engenders greater conflict in those who previously aspired to Innovative careers than in those whose prior aspirations were more traditional.

Of the hundred and fifty-two women in this follow-up study, twenty-two have children now. As compared to thirty-one percent of the non-mothers whose present activity is more traditional than were their aspirations in 1967, eighty-two percent of the mothers have experienced this change and none have become more innovative. These data are in Table V-9.

Although virtually all of the married women have been married three years or less, there is significant variation in the amount of time which elapsed between marriage and the first birth. These data are given in Table V-10, and include pregnancies in progress or terminated. Of the four ever-pregnant women who became more innovative, two were aborted, and the other two--still in progress--waited about three years after marriage to start their families. The average first birth interval of the women who became more traditional is considerably shorter.

The first measure of conflict examined in relation to birth interval is the Motive to Avoid Success. The data in Table V-11 show some tendency for the Motive to Avoid Success to be associated with being married, and with postponed pregnancy. However, among those getting pregnant, the women high in Motive to Avoid Success got pregnant somewhat earlier. Perhaps the women whose motive to approach success is stronger than the motive to avoid it manage to insure their social security by getting married without getting trapped by pregnancy, whereas women whose avoidance motive is greater allow an early pregnancy to resolve at least temporarily, the conflict for them.

In Table V-12 there appears some tendency for the presence of the Motive to Avoid Success to be associated with somewhat less change toward traditional activity, and this seems to be the case regardless of length of first birth interval.

The more direct measure of conflict, as expressed in 1967 and 1970, and its relation to first birth interval and change in role-

Table V-9. Change Group, By Number Of Living Children

<u>Number Living Children</u>	<u>More Innovative N</u>	<u>No Change N</u>	<u>More Traditional N</u>	<u>Total N</u>	<u>%</u>
None	34	56	40	130	85.5
	26.2	43.1	30.8	100.0	
One	0	4	18	22	14.5
	<u>0.0</u>	<u>18.2</u>	<u>81.8</u>	<u>100.0</u>	
Total	34	60	58	152	100.0
Percent	22.4	39.5	38.2	100.0	

$$x^2=21.55830 \quad df=2 \quad p<.001$$

Table V-10. Change Group, By First Birth Interval

<u>First Birth Interval</u>	<u>More Innovative N</u>	<u>No Change N</u>	<u>More Traditional N</u>	<u>Total N</u>
0 or less mos. (aborted)	2	1	1	4
1-8 mos.	0	1	6	7
9-12 mos.	0	0	2	2
13-18 mos.	0	2	5	7
19-24 mos.	0	1	4	5
25-30 mos.	0	2	3	5
31-36 mos.	1	1	4	6
37 + mos.	1	0	1	2
Open Interval	<u>14</u>	<u>32</u>	<u>17</u>	<u>63</u>
Total	18	40	43	101
Percent	77.8	80.0	39.5	

$$x^2=27.94081 \quad df=16 \quad p<.05$$

Table V-11. First Birth Interval, By Motive To Avoid Success

First Birth Interval	Motive To Avoid Success							
	None		Some		High		No Data	
	N	%	N	%	N	%	N	%
0-12	3	10.3	5	14.3	3	10.3	2	3.4
13-24	3	10.3	3	8.6	2	6.9	4	6.8
25-36	2	6.9	1	2.9	0	0.0	8	13.6
37 +	0	0.0	1	2.9	0	0.0	1	1.7
Open	11	37.9	15	42.8	17	58.6	20	33.8
Never Married, Never Pregnant	<u>10</u>	<u>34.6</u>	<u>10</u>	<u>28.5</u>	<u>7</u>	<u>24.2</u>	<u>24</u>	<u>40.7</u>
Total	29	100.0	35	100.0	29	100.0	59	100.0

Table V-12. Mean Change In Role-Innovation Score (1967-70), By
Motive To Avoid Success And First Birth Interval

First Birth Interval (Mos.)	Motive To Avoid Success				
		None (1)	Some (2)	High (3)	No Data
0-12 mos.	$\bar{x}$	10.000	7.600	10.000	10.500
	S.D.	3.606	3.782	6.245	3.536
	N	3	5	3	2
13-24 mos.	$\bar{x}$	10.667	10.333	9.500	11.000
	S.D.	4.041	3.786	.707	3.162
	N	3	3	2	4
25-36 mos.	$\bar{x}$	9.500	7.000	-	10.000
	S.D.	3.536	-	-	4.106
	N	2	1	-	8
37 + mos.	$\bar{x}$	-	4.000	-	12.000
	S.D.	-	-	-	-
	N	-	1	-	1
Open Interval	$\bar{x}$	8.364	6.200	6.529	5.800
	S.D.	4.007	2.336	3.659	2.984
	N	11	15	17	20
Never Married, Never Pregnant	$\bar{x}$	7.800	5.900	6.000	5.625
	S.D.	3.293	2.685	2.000	2.716
	N	10	10	7	24
All Subjects	$\bar{x}$	8.655	6.629	6.966	6.915
	S.D.	3.568	2.911	3.620	3.616
	N	29	35	29	59
					152
All Subjects		$t_{1,2}=2.4662 \quad p<.01$			
		$t_{1,3}=1.7612 \quad p<.05$			

innovation, is given in Tables V-13 and 14. The amount of conflict felt in 1967 does appear to affect the amount of change in role-innovation among women who got pregnant earlier in the marriage. The greatest increase in Traditionality among the "early pregnancy" women occurs in those who expressed conflict in 1967. The least change occurred among those who either didn't want a career or didn't want to marry. Among those who are married but have never been pregnant, the women who originally rejected either marriage or a career have become more innovative while those wanting both, regardless of conflict expressed, became slightly more traditional. Among the women who have not married and never been pregnant, there has been little change in either direction regardless of conflict expressed in 1967.

It may be then, that an early conflict of motives does produce an early pregnancy for some women, whereas for others it leads to an avoidance of those situations which would intensify the conflicts, i.e., pregnancy more so than marriage. Which of these paths is taken would appear to be in part determined by the attitudes of the men one chooses to associate with.

In Table V-14, giving the average Innovation Change Score by first birth interval and amount of conflict felt in 1970, there appear to be only three natural divisions. The greatest increase in Traditionality occurs among the two women expressing the greatest conflict: both are married and one had an early pregnancy. For the rest, the women who have never been pregnant have changed less than those who have been pregnant, regardless of their feelings about the conflict between marriage and career. This would suggest that the behavioral pattern represented by marriage, pregnancy, and change in Role-Innovation is more an outcome of earlier attitudes, than it is the creator of present attitudes. If so, it is an unusual finding for attitudes to be better predictors of later behavior than they are reflective or congruent with present behavior.

Demand Character as a Measure of Achievement Orientation

Several new measures of achievement orientation were introduced in the original study of which this is a follow-up, among them the concept of using the description of the ideal husband as a projective for the Demand Character of the Future Husband, or Husband's Demand, and Implied Demand Character of the Wife's Future, or Wife's Demand. The results with these measures in predicting aspirations in 1967 were summarized at the beginning of Chapter II. We further sought to relate these measures to change in Role-Innovation and find that a difficulty has arisen

Table V-13. Mean Change In Role-Innovation Score (1967-70), By Conflict Expressed In 1967
(Between Marriage And Career), And By First Birth Interval

Amount Of Conflict 1967		First Birth Interval					Open	Never Married Never Pregnant	All Ss
		0-12 Months	13-24 Months	25-36 Months	37 Or More Months				
Strong Conflict	$\bar{x}$	-	11.500	-	-		6.667	7.000	8.143
	S.D.	-	2.121	-	-		2.887	4.243	3.437
	N	-	2	-	-		3	2	7
Some Conflict	$\bar{x}$	-	13.000	12.000	-		7.308	5.500	6.889
	S.D.	-	-	-	-		3.568	1.977	3.309
	N	-	1	1	-		13	12	27
No Marriage	$\bar{x}$	5.000	-	-	-		5.000	7.000	5.800
	S.D.	4.243	-	-	-		-	2.828	2.775
	N	2	-	-	-		1	2	5
No Career	$\bar{x}$	9.000	7.667	10.000	4.000		5.294	5.000	6.148
	S.D.	-	2.082	4.359	-		3.216	1.414	3.359
	N	1	3	3	1		17	2	27
Want Both; No Conflict	$\bar{x}$	10.000	11.167	9.143	12.000		6.966	6.364	7.616
	S.D.	3.859	3.061	3.934	-		3.236	3.101	3.608
	N	10	6	7	1		29	33	86

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Table V-14. Mean Change In Role-Innovation Score (1967-70), By Conflict Expressed In 1970
(Between Marriage And Career), And By First Birth Interval

Expressed Conflict In 1970	First Birth Interval							Never Married Nor Pregnant	All Ss
	0-12 Months	13-24 Months	25-36 Months	37+ Months	Married				
					Never Pregnant				
Strong	$\bar{x}$ 15.000 S.D. - N 1	- - -	- - -	- - -	13.000 - 1	- - -	- - -	14.000 1.414 2	
Some	$\bar{x}$ 7.250 S.D. 5.500 N 4	10.750 3.594 4	7.500 .707 2	- - -	7.227 3.250 22	6.278 2.986 18	- - -	7.180 3.409 50	
No Marriage	$\bar{x}$ 8.000 S.D. - N 1	- - -	- - -	- - -	- - -	- - -	- - -	8.000 - 1	
No Career	$\bar{x}$ 9.000 S.D. - N 2	12.000 1.414 4	9.714 4.030 7	- - -	6.100 1.969 10	6.250 2.062 4	- - -	8.148 3.313 27	
Want Both; No Conflict	$\bar{x}$ 9.800 S.D. 3.564 N 5	8.750 3.096 4	11.500 4.950 2	8.000 5.657 2	5.897 3.509 29	6.069 2.840 29	- - -	6.620 3.486 71	
No Data	$\bar{x}$ - S.D. - N -	- - -	- - -	- - -	9.000 - 1	- - -	- - -	9.000 - 1	
								152	

due to the disproportionate loss from the sample of women having the "displacement" pattern of scores on these two variables, i.e., a high score on Husband's Demand and low score on Wife's Demand--the pattern considered both most traditional and most likely to represent internal conflict. The predominant pattern in the follow-up sample is a combination of low scores on both variables. In Table V-15, 15a and 15b, the following trends appear. From Table V-15a it is clear that level of Wife's Demand by itself does not make any difference in Innovation Change Score, whereas in Table V-15b women high in Husband's Demand are less likely to have become more Innovative or remained stable, and more likely to have become more Traditional than are the women low in Husband's Demand.

When these scores are considered simultaneously, as in Table V-15, within each level of Husband's Demand, women higher in Wife's Demand are slightly more likely to become more innovative and less likely to become more Traditional, than the women lower in Wife's Demand. However, given the small size of the differences and some of the frequencies, this trend cannot be considered reliable.

Difficulties in Pursuing Further Education or in Working

We would expect that individuals who have experienced difficulties of one sort or another in pursuing further education or in working would be more likely to change in a traditional direction than individuals not having such experiences. The association between such experiences and change in Role-Innovation are seen in Tables V-16 and 17. In Table V-16 it appears that the people who have had difficulties in getting a job or working because of being women are somewhat more likely to change in the traditional direction than are those who haven't had such difficulties. In all, a third of the women have had such difficulties. Many fewer, only 16 percent of the entire sample, report having difficulties pursuing further education because of being a woman (Table V-17). The women who do report having such difficulties are less likely to have become more innovative than those who haven't, but they are more likely to have not changed than those not reporting such difficulties. It thus appears that the disadvantages of being female are less in education than in the work world, and less likely to alter the woman's course of action. There may be greater shifts toward traditionality when women still in training begin to enter the labor market.

Table V-15. Change Group, By Demand Type

Change Group	Demand Type								Total N
	Hi Wife Demand		Lo Wife Demand		Hi Wife Demand		Hi Wife Demand		
	Lo Husb Demand		Lo Husb Demand		(Displacement)		(Generalization)		
	N	%	N	%	N	%	N	%	
More Innovative	10	27.0	14	21.9	1	11.1	9	21.4	34
No Change	17	46.0	27	42.2	3	33.3	13	31.0	60
More Traditional	10	27.0	23	35.9	5	55.6	20	47.6	58
Total	37	100.0	64	100.0	9	100.0	42	100.0	152

Table V-15a. Change Group, By Wife's Demand

Change Group	Wife's Demand			
	Low		High	
	N	%	N	%
More Innovative	15	20.5	19	24.0
No Change	30	41.1	30	38.0
More Traditional	28	38.4	30	38.0
Total	73	100.0	79	100.0

Table V-15b. Change Group, By Husband's Demand

Change Group	Husband's Demand			
	Low		High	
	N	%	N	%
More Innovative	10	19.6	24	23.8
No Change	16	31.4	44	43.5
More Traditional	25	49.0	33	32.7
Total	51	100.0	101	100.0

Table V-16. Incidence Of Personal Experience With Difficulties In
Work, By Change Group

Have Had Job Difficulties	More Innovator		No Change		More Traditional		Total	
	N	%	N	%	N	%	N	%
Yes	11	22.4	17	34.7	21	42.9	49	100.0
No	<u>23</u>	22.5	<u>43</u>	42.2	<u>36</u>	35.3	<u>102</u>	100.0
Total	34		60		57		151	

Table V-17. Incidence Of Personal Experience With Difficulties In
Pursuing Further Education, By Change Group

Have Had Educational Difficulties	More Innovator		No Change		More Traditional		Total	
	N	%	N	%	N	%	N	%
Yes	4	16.0	14	56.0	7	28.0	25	100.0
No	<u>30</u>	23.6	<u>46</u>	36.2	<u>51</u>	40.2	<u>127</u>	100.0
Total	34		60		58		152	

Multiple Regression Analysis of Major Variables from
Original and Present Follow-up Study

A number of multiple regression analyses were performed to indicate the relative strength of some of the major variables in predicting change in Role-Innovation. The variables included those found most powerful in the prediction of aspirations, but were chosen primarily for theoretical interest, rather than whatever would maximize the regression coefficient. Some are motivational, some refer to the background of the respondent, some refer to her present situation or future plans. The relationships are stated in terms of their effect on increased Traditionality. No matter what other variables were included, the First Birth Interval always turned up as the strongest predictor. Its partial correlation with the Innovation Change Score is $-.358$ (the shorter the birth interval, the greater the increase in traditionality). When we include the First Birth Interval, and all of the Demand patterns (displacement, generalization, plus the other two combinations) in a multiple stepwise regression onto the Role-Innovation Change Score, the coefficient achieved is $.4988$. The second most powerful predictor (negative) after length of the Birth Interval was the importance attached in 1967 to wanting to Be Famous as a primary goal in life. The third best predictor was Husband's Attitude toward wife's having a career (negative). The fourth best predictor was an index combining the commitment items assessed in 1967 (positive).

When the First Birth Interval is removed from the analysis, Marital Status replaces it as the best predictor of increasing traditionality. The 1967 Commitment Index is second best (the greater the commitment, the more traditional the change), next best predictor is the wish to "Be Famous" (1967), and the respondent's intention in 1970 as to how soon she would return to work after having children (the sooner she would return, the less the increase in traditionality). After these, the next variable to enter the step-wise regression depends on which Demand pattern has been included for analysis. The Generalized Demand pattern comes in a late eleventh (predicting less traditional change, as expected), but the Displaced Demand pattern comes in a fairly early fifth in strength of predicting increased traditionality. However, since the Displaced Demand pattern was so rare in the sample, we have presented in Table V-18 the analysis in which the most common Demand pattern was included--Low score on both Husband's Demand and Wife's Demand. The variables are presented in the order in which the regression algorithm picked them out of the available list of predictors according to the size of the F value (i.e., the magnitude of their effect on Change in Role-Innovation). Each of the variables entered accounted for a significant proportion of

Table V-18. Step-Wise Multiple Regression Analysis Of 1967-70 Innovation Change Score

Step Entered		Beta Coeff.	F	df	p	Multiple R
1	Marital Status ('70) ^a	-.60119	7.425	1, 150	<.01	.2172
2	Commitment ('67)	.34011	7.459	2, 149	<.01	.3017
3	Be Famous ('67)	-.46964	6.231	3, 148	<.01	.3349
4	Return To Work ('70)	-.22325	5.103	4, 147	<.01	.3492
5	Imp. Leadership ('67)	-.37797	4.391	5, 146	<.01	.3615
6	Be Leader ('67)	-.31210	3.790	6, 145	<.01	.3682
7	Man's Attitude ('70)	-.09796	3.292	7, 144	<.01	.3714
8	Fertility Risk ('70)	.10048	2.892	8, 143	<.01	.3732
9	Imp. Salary ('67)	-.11649	2.577	9, 142	<.01	.3747
10	Imp. Advancement ('67)	.28283	2.355	10, 141	<.01	.3783
11	Low Wife-Low Husband Demand ('67)	.20025	2.137	11, 140	<.025	.3792
12	Commitment ('70)	-.07042	1.952	12, 139	<.025	.3797
13	Mother's Employment ('67)	.01916	1.793	13, 138	<.05	.3801
14	Future Work Excellence ('67)	-.04013	1.656	14, 137	<.05	.3804

Note. The greater the Innovation Change Score, the greater the increase in Traditionality.

^aMarried=1, Engaged=2, Going Steady=3, Not attached=4

the variance in Change Score. In the order presented, increased traditionality is related to: being married, having greater commitment to work in 1967, having no wish to be famous in 1967, not intending to return to work soon after having children, not considering opportunities for leadership an important reason for choosing one's work, not wishing in 1967 to be known as leader, having a mate whose attitude toward one's career is negative (1970), taking greater fertility risks (1970), not considering salary or opportunities for advancement important reasons for choosing one's work (1967), scoring low on both Wife's Demand and Husband's Demand (1967), expressing low commitment to work in 1970, having a mother who worked (1967), and not including concerns about doing well in one's work in the 1967 description of one's own future.

The most surprising finding, of course, is that women who expressed greater commitment to working in 1967, are those who have become more Traditional since then. Since much of the increase in traditionality is due to women leaving work entirely to care for their babies, more than changing their occupations, it may be that many of the women who expressed strong commitment earlier have opted for a career pattern which permits early childbearing, but also an early end to both childbearing (having fewer children) and full-time childrearing, thus an earlier return to previous vocational pursuits. This, however, is only a post-hoc interpretation of a most unexpected finding. The other results in this analysis are certainly more consistent with the view that increasing traditionality is associated with low motivation for achievement and low work commitment to begin with and compounded by disapproving mates. In the next section, we report on the respondents aspirations and plans for the future. These data do indicate that many women will reverse the shift toward Traditional activities and begin or resume more Innovative pursuits.

Some Indications of Future Activity

This report has indicated that the major activity of many respondents in 1970 was a temporary by-pass on the path toward different longer-term goals. It is therefore crucial to try to determine what probable futures lie in store for these women, as they see it, and to the extent that we can predict this from the information we have about them. The last question for each respondent was "As you think of your future life, what is your picture of the way you'd like life to work out for you?" From the responses to this question, clarified if necessary by specific information about plans for further training or job changes, we

were able to assign each woman to a Future Group of Innovators, Moderates or Traditionals. Only six women were unclassifiable, due to ambiguity of the responses or contradictory responses. According to this classification, it is clear that there will be another shift, this time in the opposite direction from the first, toward more Innovation in the sample as a whole. In fact, comparing the marginal proportions in each group in 1967, in 1970, and in the predicted future, we find the shift out of Role-Innovation in 1970 more than compensated for--a slightly larger proportion of the sample are so classified for the future than they were on the basis of their aspirations in 1967. However, the even larger drop in the proportion of Moderates does not regain its former level, and the proportion of Future Traditionals settles about halfway between the low 1967 level and the high 1970 level. These distributions are presented in Tables V-19, 20, and 21. From Table V-20, it is seen that almost half of the women who became more traditional since 1967 anticipate entering occupations which are either Innovative or Moderately Innovative.

The factor most determinative of present innovation, first birth interval, has no relation to future innovation. It is most strongly correlated with the role-innovation score of the last occupation held (which includes those presently employed as well as those employed previously but not in 1970). These correlations are presented in Table V-22.

A correlation matrix for all the group measures and the discrimination indices is presented in Table V-23. Although the discrimination indices do correlate either with 1967 Group or 1970 Group, none of them correlate with Future Group. This suggests that although the perception of sex discrimination as experienced by oneself or women in general does depend on what one has attempted to do, it does not necessarily restrict what these women hope eventually to accomplish.

Table V-19. 1967 Group, By Future Group

<u>1967 Group</u>	Innovator		Future Group Moderate		Traditional		Total	
	N	%	N	%	N	%	N	%
Innovator	27	55.1	6	12.2	16	32.7	49	100.0
							33.6	
Moderate	17	37.0	14	30.4	15	32.6	46	100.0
							31.5	
Traditional	8	15.7	8	15.7	35	68.6	51	100.0
							34.9	
Total	52	35.6	28	19.2	66	45.2	146	100.0
							100.0	

$$x^2=25.03793 \quad df=4 \quad p .001$$

Table V-20. Change Group, By Future Group

<u>1967-70 Change Group</u>	Innovator		Future Group Moderate		Traditional		Total	
	N	%	N	%	N	%	N	%
More Innovative	14	41.2	8	23.5	12	35.3	34	100.0
							23.3	
No Change	26	44.8	8	13.8	24	41.4	58	99.9
							39.7	
More Traditional	12	22.2	12	22.2	30	55.6	54	100.0
							37.0	
Total	52	35.6	28	19.2	66	45.2	146	100.0
							100.0	

Table V-21. 1970 Group, By Future Group

<u>1970 Group</u>	Future Group						Total	
	Innovator		Moderate		Traditional		N	%
	N	%	N	%	N	%		
Innovator	34	75.6	4	8.9	7	15.6	45	100.1
							30.8	
Moderate	4	16.7	15	62.5	5	20.8	24	100.0
							16.5	
Traditional	14	18.2	9	11.7	54	70.1	77	100.0
							52.7	
Total	52	35.6	28	19.2	66	45.2	146	100.0
							100.0	

Table V-22. Correlations Between Future Group And Selected Variables

Future Group with:

Role-Innovation Score in:	<u>r</u>	<u>N</u>	<u>p</u>
First Occupational Choice - 1967	.3563	146	.001
Last Occup. - 1970	.5055	146	.001
Present Major Activity - 1970	.4849	146	.001
First Birth Interval	.0566	146	n.s.

Table V-23. Correlation Matrix Of All Group Variables And All Discrimination Indices

	1 1967 Group	2 Change Group	3 1970 Group	4 Future Group	5 Educ. Discr.	6 Work Discr.
2 Change Group	-.3188 (152)***					
3 1970 Group	.4119 (152)***	.4183 (152)***				
4 Future Group	.3130 (152)***	.1928 (152)***	.5176 (152)***			
5 Education Discrimin.	-.1784 (152)***	.0449 (152)	-.0833 (152)	-.0471 (152)		
6 Work Discrimin.	-.2781 (152)***	.1093 (152)*	-.1706 (152)***	-.0860 (152)	.2246 (152)***	
7 General Discrimin.	-.2468 (152)***	.0706 (152)	-.1222 (152)*	-.0733 (152)	.6354 (152)***	.5021 (152)***
	***p<.001	**p<.01	*p<.05			

CHAPTER VI

Summary of Findings

In this study 152 college-educated women were re-interviewed three years after they graduated from the University of Michigan and asked about their educational, occupational, marital, and maternal experiences and how these affected their aspirations for the future. All of them had been part of the Michigan Student Study during which they were interviewed in their senior year and from which their occupational aspirations, the main interest of the study, and many other characteristics were assessed. The original study, using only the data gathered in 1967 (their senior year in college), investigated the background, personality, and college experience factors associated with Role-Innovative occupational aspirations, i.e., choice of an occupation typically held by men.

The follow-up study was designed to discover what had happened to the aspirations expressed in 1967, and the reasons, as well as to gather more information for testing some of the more tentative findings of the initial study. These findings have been organized according to the initial aspirations in 1967, the Innovativeness of the women's activities in 1970, and the factors associated with changes in Innovativeness between 1967 and 1970.

Role-Modeling

One of the most important questions to be followed-up was the extent to which role-modeling played a part in shaping the aspirations of these women. Some additional support for the belief that this is the case comes from the women's own reports about the sources of influence on her occupational choices and from more detailed information about the nature of her perceptions of her parents in various roles. In the first case, it is surprising, given the fact that men dominate the innovative occupations (by definition), that as many respondents mention women as mention men as being the source of their initial interest in their field. However, perhaps because of the paucity of role-models, almost half of the Innovators did not mention any individuals as responsible for getting them interested in their fields.

Faculty Models

More detailed questions about the role of various academic contacts during the undergraduate years in shaping one's aspira-

ations, interests, and motivation revealed clear patterns of discrimination and encouragement. A substantial minority felt that various faculty members, particularly male faculty, held lower expectations of them because they were women, and this was more true of the Innovators and Moderates than of the Traditionals, and more so in the fields of math and the sciences than in the social sciences or humanities. Role-Innovators received more encouragement from male faculty, whereas Traditionals got more encouragement from female faculty. This, as well as the findings on diminished expectations, is associated with the difference in sex-ratio among the faculty in various fields. This is not, however, the entire explanation since although Traditionals were quite concentrated in a small number of female-dominated fields, the Role-Innovators are much more heterogeneous in the kinds of fields they were pursuing (Tangri, 1969). In general, professors gave more encouragement and had more influence on the respondents than did junior faculty, and the women faculty who are mentioned are mostly in the lower ranks--particularly for Innovators. Furthermore, the academic women who were mentioned as having an important influence on the respondents were less likely to have had purely social contacts with the respondents or to become personal friends than were the academic men who had such influence. Clearly, the existing social mores regarding social contacts between persons of same or different sex operated to maximize the opportunities for informal influence across sex lines. Those mores seem to be changing, albeit slowly. From these data, and from other data on the attitudes of their male consorts, it would appear that a supportive role-partner of the opposite sex can be an important ally for the Role-Innovator.

There were also group differences in the nature of the influence exerted by the various persons mentioned. Role-Innovators are most likely to refer to intellectual influence as being primary, whereas Moderates and Traditionals were more likely than Innovators to refer to motivational influence. The presence of more women on the faculties now dominated by men would surely provide more of the motivational inspiration women need to transcend the sex-barriers in the educational and occupational world.

Family Models

The addition of more information on the question of aspects of parental role-modeling has not simplified our understanding of this complex phenomenon. Both parents are rated most favorably in their performance of their work and parent roles, moderately favorably in their roles as spouses and the quality of the marriage, and least favorably in their roles as citizens. Fathers

were rated more favorably than Mothers as earners and as workers who "do their best and derive satisfaction from their work." Mothers, on the other hand, were only slightly better "workers in the home" than fathers!

For most of the roles, Traditionals are more lavish in their praise of mothers than are the Innovators. The exception is the rating of Mother as one who does her work well and derives satisfaction from it, where Innovators' mothers get slightly higher praise. Since the real crux of the maternal modeling question hangs on the nature of the maternal model, these data were further examined separately for the women whose mothers had higher education. For this subsample of respondents with better educated mothers, the group difference is reversed, with Innovators tending to give more favorable ratings of their mothers than the Traditionals. These findings are quite comparable to those in the initial study and together with the following data, confirm the interpretation that Role-Innovators of more educated mothers are the least likely to "cross-identify" with their fathers.

When respondents were asked which parent they would be satisfied to be like in any of these roles, the most notable finding was that more women would emulate both parents than would choose one parent over the other in any of the roles. Neither is it the case that emulation of one parent carries across all the roles that the parent plays. Fathers are more attractive models as earners, workers, and spouses, but not as citizens or parents.

The group differences are very complex. Very generally, Role-Innovators seem more likely to make reciprocal judgements (the success or failure of each parent reflects on the other), but where a preference does exist, the mother appears more emulous in the parent role, whereas the father appears more emulous in the spouse role. In the more public roles of citizen, earner, and worker, Traditionals are more likely than Role-Innovators to reject both parents. For the sub-sample of respondents with more educated mothers, the Innovators are more likely to find their mother or both parents emulous, and less likely in general to find their father emulous or to reject both parents, than is true for the total sample of Innovators.

Personality

Achievement-Related Orientation

The items developed for the follow-up study to further differentiate the various intrinsic and extrinsic motives proved

to be moderately successful for this purpose, and to provide useful insights into the kinds of differences between the groups' post-graduation work experiences. Most of the relationships between the clearly extrinsic and the clearly intrinsic motives are in the expected direction, lending some internal consistency to the notion of these concepts as distinct entities. In general, the relationships among the 1970 variables are stronger and more consistent than between these and the earlier measures. In particular, three clearly intrinsic sources of satisfaction in one's job, Risk, Demand, and Challenge, form a strong cluster of inter-relationships, and the two most clearly extrinsic sources of satisfaction, Organizational Setting and Practical Requirements are also significantly correlated with each other. Working With People (rather than things) seems more closely related to the extrinsic factor, and--most unexpectedly--Autonomy is more related to the extrinsic factors from both the old and new set of variables rather than to the intrinsic factors. This may be because the Traditionals are already enjoying greater autonomy in the work setting than the Innovators who are more likely to be in training still, or in more preparatory stages of their careers. The strong association between the extrinsic variable Importance of Leadership and the intrinsic variable Risk suggests that to aspire to leadership in the work setting is generally seen as entailing serious psychological risks.

Motive to Avoid Success appears to be related only to two of the new variables, Demand and Work With People. Whereas the relationship with the first reflects the fact that women who are highly achievement oriented are those subject to anxiety about success, that with the second suggests that one expression of the anxiety about the sex-appropriateness of success for women is to channel one's achievement strivings into appropriately feminine people-oriented fields. At the same time, it indicates that the motive does not thereby dissipate.

Fertility Risk-Taking

Three items were developed to assess the extent to which the respondent was likely to take chances with getting pregnant. Unfortunately, they were uncorrelated with each other, and thus could not be used together as an index of fertility risk-taking. Nor did any of them relate to the First Birth Interval (number of months between marriage and birth of first child). Role-Innovators have the greatest discrepancy in level of risk-taking between the items, and report the most risk-taking on the most direct item: "How much have you ever actually risked getting pregnant when you didn't want to?" This item elicits the greatest frequency of reported risk-taking from all three groups.

Descriptions of Self and Stereotype of Career Woman

The traits which were consensually attributed to a "Career Woman" are: *unconventional, relies on own opinion, others depend on her, intellectual, and successful.*⁴ There were no significant group differences in the way respondents described themselves on all the stereotypic items taken together, but Role-Innovators were higher on the first four items, and lower on the fifth item than were Traditionals. Factor analyses of each semantic differential description (Self and Career Woman) yielded basically the same three factors. The first factor is dominated by strongly sex-typed characteristics such as "masculine", "insensitive", and "cold"; the second factor suggests self-reliance and dependability (e.g., "strong", "others depend on her/me"); and the third factor describes an autonomous belief system or life-style (e.g., "agnostic", "unconventional", "clever").

Post-B.A. Experience

One half of the respondents are working full-time, slightly over one fifth are full-time housewives, one sixth are studying full-time, less than one tenth are working part time. Three times as many Innovators as Traditionals are studying full-time, whereas Traditionals are more likely to be working full-time. About 60 percent of each group is now married. One quarter of the 1967 Moderates and one fifth of the Innovators and Traditionals are now mothers and full-time housewives. Most of those who are working or studying are in the humanities and the social sciences. The life sciences (including the health professions), and education are the third most frequent fields, followed by law-business-government, math, and lastly, physical science. In spite of a general shift in the sample toward more traditional activity--largely accounted for by the mother-housewives--there is strong stability in degree of Role-Innovation over the three-year span for the sample as a whole and for Innovators and Traditionals in particular.

Education

Two 1967 Role-Innovators have completed a Ph.D. and a law degree, eleven more have completed Master's degrees. One Traditional has completed the Doctorate in Education, sixteen have completed Master's Degrees, and three have Teaching Certificates. Most of the respondents who are working on doctorates are Role-Innovators, as are all those working toward the M.D., D.D.S., or J.D. (Doctor of Jurisprudence) degree. Most of the Master's degrees in progress, on the other hand, are among the Moderates and Traditionals, and so are the three Teaching Certificates in

⁴Also: agnostic, hard, deliberate, politically liberal, strong, clever, active, tense, confident, competent, serious, cold, and practical

progress. Some women who are working on degrees are not at present enrolled for courses. Only one fourth of the sample are not presently engaged in studies of any kind.

The 1967 Role-Innovators still show more diversity of fields than the Traditionals, and most of their studies have been in Graduate School, whereas for Traditionals these have been in professional schools or other institutions.

Discrimination. Sixteen percent of the entire sample and 30 percent of the Innovators report experiencing difficulties in pursuing further education because of their sex. Most of the difficulties encountered were outright discrimination in admissions, strong generalized discouragement from faculty, financial aid and job placement discrimination. A small number of the difficulties involved role conflict or the husband's location and career. The generalized belief that women have such difficulties is more widespread than is the women's own experience with such difficulties or that of their personal acquaintances. This probably results from the mass media coverage of issues raised by the women's movement, since formerly we believe the reverse would have been true. Very few women think that women in general have advantages, or that they themselves have had advantages because of their sex; most of those that do believe so, feel that the difficulties are still greater than the advantages.

Work

In general, the respondents' present occupations are very similar to what they said in 1967 they wanted to do. The jobs most frequently mentioned by Role-Innovators are technician, graduate or research assistant, and computer programmer or systems analyst. For Moderates, the most common jobs are graduate assistant, school teacher, editor or reporter. The most common jobs among the Traditionals are school teacher, nurse, medical or dental technician, and secretary.

Discrimination. One third of the sample and half of the Innovators report having had difficulties in getting jobs or in working because of their sex. Such difficulties are much more common than in education for all three groups. Most of the difficulties encountered were discrimination in salary and in admission to trainee programs, less qualified men getting the jobs, having to start as a secretary, scepticism on the part of prospective employers about hiring a young woman or a married woman because of their assumptions about her being temporary, men being less willing to deal with women in authority, harrassment by degrading questions, whole categories of jobs being reserved for men only,

quotas on the number of women permitted into a job category, and general discrimination through innuendo and bad manners. Some women also mentioned the lack of part-time jobs and child care as working particular hardships on women who want to work. As in the case of education but less so, the generalized belief that women have such difficulties is more widespread than is the personal experience with such difficulties; yet two thirds of the sample personally knew women who did have such difficulties.

On each of three Discrimination Indices dealing with Education, Work, and Experiences in General, 1967 Role-Innovators experience the most, Traditionals experience the least, and everyone's score is higher for work discrimination than for educational discrimination. Very few felt that they had had advantages because of their sex, and some of these dealt with their "exploitability" as women (e.g., they could be hired for less). About one fourth of the sample felt that nothing (external or internal barriers) had kept them from getting either the jobs or training that they wanted.

In spite of the general belief that women face substantial difficulties in working and studying which are not subject to their control, when answering the final summary question on sex-related difficulties, two of the three most frequent problems experienced are attributions to the woman herself (i.e., "indecision or hesitation on my part" and "I felt unsure of my ability to do it"). The third most frequently mentioned problem is discrimination based on sex or sex and marital status.

Almost the entire sample agreed that women with children have special difficulties in working or studying. These referred to the special obligations they have to the child, not having enough time, inadequate child care arrangements, and psychological conflict. Furthermore, two thirds of the respondents knew women who were having these difficulties. There was less agreement that married women have special difficulties aside from those connected with having children. Still, almost two thirds of the sample thought this was true, and two thirds of these knew women who were having such difficulties. These referred to their responsibilities, time pressures, and husbands (their demands, their lack of help or support, their anxiety about competition with their wives, and the assumption that their requirements take priority).

Commitment to Career

In 1967 three items were used as measures of the woman's career commitment. These were whether she would work after getting married, after having children, and how soon she would

return to work. Role-Innovators showed more commitment than Traditionals. In 1970, many more women, an overwhelming majority, now say that they will work after having children. This is as true for those who already have children (some of whom have already returned to work) as for the rest. In fact, mothers now say that they want to return to work sooner than the non-mothers say they will. In spite of this general shift toward earlier resumption of work, the answers given to this question at these two points in time are highly correlated. Also, as in 1967, greater commitment is associated with greater Role-Innovation of the woman's activity in 1970.

Marriage and Motherhood

Timing of marriage as desired by the respondents in 1967 predicts well to actual timing of marriage. When asked what their man's attitude would be toward their having a career, half of the women say that he would like it (about equally so in each of the 1967 groups), less than 40 percent think he would be neutral, and only ten women say he would be against it. There is some trend for Innovators to have more favorable mates, and the relationship is even stronger for married women.

Conflict. Both in 1967 and in 1970, 1967 Innovators report having more conflict over wanting both marriage and a career than do Traditionals. Traditionals are more likely than Innovators to say they do not want a career, but even their modal response is that they want both and don't feel any conflict about it. Most of the women who said in 1967 that they felt strong conflict, or that they didn't want a career, have married, not most of the others. However, the timing of the marriage was not related to the expression of conflict as was expected. Instead, women who were high in the Motive to Avoid Success in 1967 are more likely to be married than those who were low or showed no Fear Success. There is some evidence that marriage does increase the sense of conflict, particularly if it occurs earlier. In some cases, the result is the elimination of the career goal.

Women who want both a career and marriage are more likely to have mates who approve of this than are the women who do not want a career, and women with approving mates are less likely to report conflict if they want both, than women with disapproving mates. However, most of the women who do report conflict in 1970 also report having favorable or neutral mates, and furthermore, they express more conflict now than they did in 1967. This is discussed further below. Similarly, women high in Fear Success are somewhat more likely to have husbands with favorable attitudes.

The timing of the first birth relative to graduation appears to be a function of the presence of two goals and of conflict over those goals. Women who in 1967 said they wanted both marriage and a career had their first babies about half a year later than the other women. Of those who felt conflict in 1967, almost 90 percent have still not had babies. Thus, multiple goals and conflict over them tends to delay the first birth. On the other hand, having a baby--especially recently--seems to create conflict: those who say they feel no conflict in 1970 have either not started their families, or did so earlier than those saying they do feel conflict. The minority who say in 1970 that they do not want a career are more likely to have already started their families than those who do want a career, but did not start any earlier than the others.

The Motive to Avoid Success, in this instance, also seems to perform as a measure of conflict: presence of the Motive to Avoid Success tends to be associated with being married, and with postponed pregnancy--a combination which increases one's social security without greatly increasing role conflict. However, of the women getting pregnant, the women high in the Motive got pregnant somewhat earlier. The data are not very strong, but there may be something of the use of an "accidental" pregnancy to resolve strong conflicts.

In 1967 the ideal number of children averaged 3.47; Traditionals wanted significantly more children than the other women, and Innovators wanted to start their families significantly later than either Moderates or Traditionals. In 1970, the group differences remain significant and are in the same direction, but there is an overall decline in the number of children now wanted, to an average of 2.38. Over 60 percent of the women want fewer children now than they did before, and only four percent want more. Similar changes occurred among the mothers, although more of them remained stable in their ideal number of children wanted. Again, in spite of the general shift, individual ^{rank order} stability is quite high.

As compared to ideal number of children, the expected number of children is even smaller, 2.29. The ideal-expected discrepancy is small and for almost two thirds of the women in each group there is no discrepancy. Only seven percent of these women think they will end up with more children than they really want. One possible source of the ideal-expected discrepancy could be the husband's desires. These follow the pattern of their wives, with Innovators husbands wanting significantly fewer children than the husbands of Moderates or Traditionals--and fewer even than their wives want!

The respondents were also asked in 1967 and 1970 when they would want to start their families and this does show substantial

change. Among the unmarried women about a third want to start earlier and a third later. Married women, on the other hand, are more likely to have moved up their desired timing of the first child, suggesting that marriage does trigger fertility desires.

For those who have already started their families, there is no relation between the timing desired in 1967 and the actual timing of their first birth. Almost two fifths are having their first baby earlier than they said they would, and almost one fifth are having it later. The groups do not differ in the size of the interval between graduation and first birth.

The most distress on account of too early pregnancy was experienced by the Moderates. Over half of the parous women reported feeling no conflict in 1967 between wanting marriage and a career, but two thirds of them now say that their pregnancy was too early. Those who did feel conflict in 1967 now report the least distress over the timing of the pregnancy. Those who didn't want a career in 1967 are most likely to feel that their pregnancy was earlier than expected, but not necessarily to feel that the timing was "poor." Comparing the statements of all the respondents about conflict in 1967 and 1970, it appears that pregnancy, particularly if it is earlier than expected, does increase women's conflict over wanting both marriage and a career. Whereas anticipation of conflict leads to behavior patterns which will minimize conflict without sacrificing goals.

A majority of each group and of their husbands express no sex preference for offspring, but when there is a preference, it is overwhelmingly in favor of boys. This is the least true of the Innovators, however. Husbands of 1967 Traditionals show the greatest preference for girls, whereas husbands of Innovators (and Moderates) show the greatest preference for boys.

Of the attitudinal changes wrought by becoming a mother, the most common was a decrease in the desire to work or study, and the feeling that these were more difficult as a result of motherhood.

Attitudes on Family Formation and The Women's Movement

Traditionals are the least favorable toward the idea of adopting children, though almost everyone would adopt under certain circumstances. Over half of the sample felt abortion should be available to any woman on demand. Another third of each group felt it should be up to a woman and her doctor. Innovators show a slight tendency toward somewhat more liberal views on abortion, Traditionals the least liberal. Similarly, Innovators are slightly more radical in their position on the issues raised by the woman's movement, but the overwhelming choice of each group is the moderate position.

Factors Associated With Role-Innovation in 1970

Marriage

Marriage and the husband's attitude are associated with Role-Innovation in 1970, but marriage more so than the attitude. (Both are also related to conflict and change in conflict, but in this case, the man's attitude more so than marriage.) Married women are less innovative in 1970 than the unmarried women, and married women with husbands who approve of their wives having a career are more innovative than those with disapproving husbands. In contrast to their boyfriends' attitudes in 1967, none of the husbands are reported using the argument that staying home is more attractive to the wife as their reason for disapproving of her working. In general, the level of approval attributed to these husbands is higher than it was for the boyfriends in 1967. But the women who are innovating now do not attribute more "liberal" reasons to their husbands than do the other women, as was the case for 1967 Innovators (with respect to boyfriends in 1967 or husbands in 1970). Economic motives are attributed to their mates' career approval only by 1970 Moderates and Traditionals.

In a series of hypothetical situations involving varying degrees of success and competition with one's husband, the men are said to be most negative in situations where the wife is more successful than he is in his own field; the most positive attitudes are attributed to him in the situation where she is very successful in her own field. The group comparisons suggest that the more competitive the situation, the more anxiety is aroused in those women for whom it has the greatest immediate relevance, i.e., the 1970 Innovators. The data on these items substantially modify the interpretation of the results on the earlier item which merely asks for husband's attitude toward her having "a career."

Innovation in 1970 was associated with feeling that one's working or studying creates stresses for one's husband. On the other hand, most women felt that it also created benefits. Competition as a stress was mentioned only by the 1970 Innovators, and the husbands' sharing of the wife's problems or the domestic chores was considered a stress more by 1970 Traditionals than by the others. The most frequently cited benefit of working in each group was financial, and the next most frequent was the respondent's own happiness or being a more interesting companion.

Motherhood and Child Care

Most of the relationship between marital status and 1970 Role-Innovation is actually due to maternity--a characteristic

unique to wives. Of the 22 mothers, only a third use any child care arrangement other than themselves regularly. 1970 Traditionals appear to get more help from family members and therefore have a smaller child care bill. Although most of the sample tend to think first of themselves as the ideal person for their child's care, they respond quite favorably to the concept of an independent, professionally-run, flexible, convenient, and reasonably priced child care center with an educational program. There were no group differences in these attitudes, but the availability of the latter would affect many of the women's decisions about returning to work after having children.

The self-sufficiency of the household considered so ideal in the above responses, really turns out to be the self-sufficiency of the wife, because the amount of the husband's contribution to household tasks appears very small. This is the more surprising in view of the fact that most of these families are still in very early stages of development when there are no children, or only one, most wives are working or in school, and sex-role differentiation should be at its lowest point in the family cycle except perhaps after retirement. Given these role definitions, it is obvious that the onset of children with the enormous increase of work that involves, must drive many women out of the labor market and out of advanced training. The group differences are negligible, though husbands of Traditionals appear slightly less helpful than other husbands.

Attitudes Toward Domestic and Non-Domestic Roles. Motherhood has a greater impact on one's feelings about marriage and motherhood and about work and study than does marriage by itself. Most of the changes in attitudes toward marriage and motherhood are in a positive direction, but some negative effects, particularly as a result of marriage, also occurred, though only for 1970 Moderates and Traditionals. It may be that for these women who counted more heavily on marriage to fulfill their needs, the realities are more likely to fall short of expectations. The Innovators' marriages are perhaps more successful from their own point of view.

Feelings toward work and study have changed mostly in the negative direction as a result of marriage and motherhood, particularly for the 1970 Traditionals.

Work

1970 Traditionals are less satisfied with their jobs than the other women, are least interested in being promoted where they now work and are most likely to be in jobs where promotion is not

possible. Innovators are most interested in being promoted, and least likely to prefer different work than they are doing now. Of those working where promotion is feasible, 1970 Innovators and Moderates are more likely to think that their chances of being promoted are good to excellent.

Although more of the Innovators (1970) are still in the apprentice stage of their career, they get most of their satisfaction from the achievement-related aspects of their work, and least from the well-heelled quality of the organization. 1970 Moderates get most of their satisfaction from the fact that they work with people rather than things, the challenging aspects of their jobs, and the fact that it meets some of their basic practical requirements. They get least satisfaction from the amount of Risk involved. 1970 Traditionals get most of their satisfaction from the fact that their job meets practical needs, their autonomy on the job, and the fact that it demands a lot from them. But 1970 Traditionals have the lowest overall satisfaction scores of any of the groups, and 1970 Moderates have the highest.

Only the 1970 Moderates would like a significant increase in any of the achievement-related aspects of their job. The Innovators, who are perhaps getting as much of this as they can handle, would most like improvement in some of the practical aspects of their job. Traditionals--who are already getting most of their satisfaction from these practical aspects--would like even more improvement in that area, as well as in the kind of people they work with. We do not know whether this is related to the fact that they, more than others, have co-workers of the same sex, or whether they are more likely than the others to be in subordinate positions or to be treated as subordinates by those for whom they work.

1970 Moderates are the least likely to feel that their present job is a compromise, and if it is, they are the most likely to feel that they will have the kind of job they really prefer either soon or not at all. 1970 Traditionals are the most likely to feel that their present job is a compromise with what they would really prefer to be doing, and therefore, are also the most likely to want another job now.

Although the 1970 Traditionals appear to be the least satisfied with the jobs they have, they have also experienced the least discrimination because of sex in getting these jobs. The result, then, is that the jobs that are easiest to get, are also the least satisfying, even for those who originally wanted them.

Education

Whether a woman decided to work immediately after graduation or travelled, or entered graduate training immediately does not affect the innovativeness of her present activity. With respect to the level of satisfaction from the studies one is doing, the pattern which appears so clearly in the data on work experiences, re-appears in the data on educational experiences, though somewhat less strongly. Of the women now pursuing graduate studies, most of those reporting that their present field of study is a compromise are the 1970 Traditionals; and 1970 Innovators report more difficulties in pursuing further education than the others, but they are still a minority of their group.

Although 1970 Innovators give every other sign of having a life pattern of fairly continuous employment, they are more resistant to stating outright that this is what they want to do than are the 1970 Moderates (though they are more likely to admit it than are the 1970 Traditionals).

Multiple Regression Analysis of 1970 Role-Innovation

A comparison of selected variables from the initial and follow-up studies showed that the strongest predictors were the aspirations reported in 1967 and the First Birth Interval. The next best predictors are the Commitment to a career as measured in 1967, the Motive to Avoid Success (which predicts positively to Role-Innovation in 1970), and Implied Demand Character of the Wife's Future (or Wife's Demand) which predicts positively to Role-Innovation in 1970.

Change in Role-Innovation

There has been a substantial shift in the level of occupational undertaking between 1967 and 1970. About two fifths of the sample did not change in Innovation, another two fifths became more Traditional, and the remaining one fifth became more innovative. The 1967 Moderates changed more, in the traditional direction, than the other two groups. Married women changed more than unmarried women, and although this is true within each of the original groups, the effect of marital status is greatest among the 1967 Innovators, least of course, among the 1967 Traditionals.

Marriage, Conflict, and Change in Innovation

A complex set of relationships emerged between marital status, husband's attitude toward wife having a career, Role-Innovation and innovational change, and levels of and change in expressions

of conflict between wanting both marriage and a career. Looking first at innovation itself, we found that the original groups tended to have found men whose attitudes coincided with their own aspirations, particularly in the case of husbands. And although married women are less innovative in 1970 than unmarried women, if they are married to supportive husbands they are more innovative than if married to unsupportive husbands, and furthermore are more likely to have increased in their innovativeness. On the other hand, for married and engaged women, greater conflict in 1967 is associated with increasing traditionality, although within each category of conflict in 1967 favorable attitudes on the part of the husband or fiance are associated with less increase in traditionality. Feeling conflict in 1970 also tends to be associated with more traditional change, but not consistently across marital statuses, and only weakly so even where true. Feelings of conflict in 1970 are clearly related to the husband's attitude: women whose men have favorable attitudes towards their having a career are least likely to report feeling conflict and least likely to say they don't want a career; women whose men have "neutral" attitudes report more conflict and more rejection of career; women whose men have unfavorable attitudes are most likely to simply reject having a career at all. All these relationships, then point toward a consistent association between husband's attitude, innovation and change in innovation, and felt conflict. Marital status itself increases traditionality somewhat and also increases conflict, and pregnancy increases both conflict and even more traditional change.

If we look only at the changes in reports of conflict between 1967 and 1970, we find that reports of conflict have increased among all the women, regardless of marital status. The change among the unattached women is toward increased career commitment (wanting both) and increased conflict. Among the attached women, those with favorable husbands have shifted their reports from rejecting either marriage or a career, to wanting both and mostly feeling conflict about it; the change among women with neutral mates, is from reporting no conflict about wanting both, to either rejecting a career or reporting conflict about it; the change among women whose men disapprove is entirely from feeling no conflict about wanting both, to rejecting the career goal entirely.

The rather unexpected result then, is that the man's attitudes toward the woman's having a career seems to operate as a selective filter on what goals she sets for herself, thus setting the stage for either experiencing conflict over wanting a career or eliminating the conflict by surrendering the career goal. The conflict is never resolved by surrendering marriage as a goal. We therefore have the paradoxical finding that among the hetero-

sexually attached women, more favorable attitudes on the man's part towards the woman having a career tend during this period to increase the woman's feelings of conflict over wanting a career (though the new level of conflict is still lower than that of women with less approving mates). Although the unattached women also increase their reports of conflict in this period, the increase is less than it is for any of the other groups--unless one considers the renunciation of the career among women with disapproving husbands as an expression as well as resolution of conflict.

The Motive to Avoid Success, which was assessed only in 1967, did not show the same relationships to change in innovation as did the direct expression of conflict discussed above. It is not associated with greater increases in traditionality, in fact the opposite may be true, both for the sample as a whole and for each marital status. This does not support our expectation that marriage would provide a kind of security for women high in Motive to Avoid Success which would better permit them to raise their levels of aspiration. Nor does this depend on the man's attitude, since this is unrelated to change in innovation regardless of level of Motive to Avoid Success. In this case, the Motive appears to act more as a measure of striving, dampening the general tendency toward increased traditionality. This is not only true across all marital statuses, it is also true regardless of how soon after marriage a woman had her first baby. Thus, although a few women high in Motive to Avoid Success may have been propelled into somewhat earlier pregnancy, it still tended to reduce the general trend toward traditionality.

Maternity, Conflict, and Change in Innovation

Becoming a mother can create or heighten conflicts about combining roles, or it can be used as a way of resolving such conflicts. The women who became more traditional had their children within a shorter period after getting married than those who became more innovative or did not change. The greatest increase in traditionality among the "early pregnancy" women occurs in those who expressed conflict in 1967; the least change occurred among those who either did not want a career or did not want to marry. Among the women who have not married and have never been pregnant, there has been little change in either direction, regardless of conflict expressed in 1967. Clearly, then, conflict itself does not increase traditionality over this time period. It does mediate both marital and fertility behavior, which in turn affect both traditionality and subsequent conflict.

Demand Character as a Measure of Achievement Orientation

Wife Demand remains a relatively strong predictor of present (1970) innovation. It does not relate at all to change in innovation. This, of course, would be difficult since it predicts in the same direction to both innovative aspirations (1967) and present innovation (1970). Even so, women who are higher in Wife Demand are slightly more likely to become more innovative and less likely to become more traditional than women lower in Wife Demand. Husband Demand, on the other hand, is clearly and positively related to increasing traditionality.

Difficulties in Working or Pursuing Further Studies

Although there is some association between having had difficulties in getting jobs or in working, and in pursuing further studies, on the one hand, and likelihood of increased traditionality on the other hand, these do not appear to be major determinants of change in innovation. There may be greater shifts toward traditionality when those still in training begin to enter the labor market.

The Relative Strength of Various Predictors

The strongest predictors of increased traditionality are: maternity (or its nearest equivalent--marital status), then lower commitment in 1967, lesser value placed in 1967 on being famous someday, planning in 1970 to return to work later after having children, and displaced Demand, in that order.

Future Activity

The respondents' plans for their futures clearly foretell another shift, but in the innovative direction. If their plans materialize there should ultimately be at least as many Innovators in the sample as there were in 1967, fewer Moderates, and somewhat more Traditionals. Present maternity has no relation to future innovation. Of course, there is no way of knowing how those plans and subsequent behavior will be affected by future fertility. Nor are any of the discrimination indices related to future innovation, suggesting that though the perception of sex discrimination may depend on what they have done, it does not necessarily restrict what they hope eventually to accomplish. It will, however, make it harder.

CHAPTER VII

Concluding Remarks

There have been significant changes in the lives of the women in this study during the three years since they left college. Not only have they entered new phases of the life-cycle, but there have been real shifts in their long-term expectations, and some of their values. Most significant are the value changes in the areas of childbearing and participation in the work force. Moreover, these changes are complementary in that reduced fertility desires permit greater work commitments. These changes are consistent with and reflect the current national debate on sex roles and may anticipate similar changes in the larger society of which this college-educated sample is supposed to be a vanguard.

There are bases for recommendations to social policy makers who want to plan for the rapid changes taking place in women's roles. Our findings on the complex relationships among marital status, husbands' attitudes, feelings of conflict, and behavior suggest a number of principles for policy in this area. The first is that helping women anticipate conflict between their various roles will produce more planful behavior than if this issue is given a Pollyanna glossing-over in exhortations to bigger and fuller lives. The aim of such education would not be to discourage women from undertaking the multiple roles which beckon, but rather to allow them the time to plan for the spacing of these decisions in ways which will maximize their choices. It would also inoculate them against the danger of internalizing a sense of personal failure when the multiple demands and expectations appear overwhelming. Educating women to handle these conflicts also means creating the awareness that one's mate's attitudes and behavior significantly affect one's choices and one's feelings about the choices one makes. New bases for mate-choice and new division of labor should be considered in advance of making long-term commitments to such a relationship. This, in turn, means that men, too, have to be re-educated on what their relationships to women may be like, and what roles of their own may need to be changed.

In much broader terms, men and women need education in recognizing prejudices and discrimination in roles other than personal: as employers or employers' representatives, teachers, and counselors. Not only should there be education for greater consciousness, but also education about how to stop discrimination, and in particular, what steps to take when being personally discriminated against.

This kind of education would reduce some of the barriers to women's exercise of increasing options. There are also steps which can be taken to increase women's motivation for and interest in occupations previously reserved for men. Not only should there be special recruitment campaigns directed at women from these fields, but women themselves need leadership training, and need to recognize their own needs for, and advantages of, being economically self-sufficient--so that considerations of salary and advancement become a part of their vocational planning. When women have real choices to make (both psychological and social freedom to choose) between economic or political power and other kinds of value (service to others, self-discovery, convenience, etc.), then more women will be choosing roles which really suit them, rather than being confined to the limited repertoire of sex-typed vocations.

The recommendations--or principles for guiding policy--have so far dealt with reducing psychological barriers to women's achievement of personally satisfying lives. There are clearly many non-psychological barriers to this goal and many other writers have addressed recommendation to these. An excellent set of recommendations for higher education is provided by Patricia Cross (1972), and these are fully endorsed here. They are: increased recruitment of lower SES women; greater financial aid and more equality of job opportunities and salaries on campus, as well as elimination of discriminatory housing and dining requirements; yearly "check-ups" for admission and enrollment figures, and institution affirmative action programs where needed; fact-finding committees with strict deadlines to assess local needs for child care centers, part-time study options and counseling; and reallocation of institutional resources to achieve equality of opportunity. Her final recommendation is the appointment of women to positions where they can contribute on a continuing basis to these goals, and where they serve as important models for students of both sexes. Our data indicate that women models, rare as they are, served as important sources of influence on our Role-Innovators.

The greatest source of conflict for women who wish to pursue careers of any kind and which arises for most women primarily after completing their education (though mothers in graduate training are on the increase), is the difficulty of providing good care for their children. It is also the clearest area of neglect of specifically female needs, as abundantly evident in the data we have collected here. The idea that good child care could be institutionalized--that is, become as regular and accessible a part of our social life as public education, libraries, or parks--

hardly occurs to anyone. But when suggested, it is clearly attractive to many and would make a difference in their choice of roles. The availability of such services would greatly reduce mothers' conflicts over multiple role pursuits and it would make it harder for colleges and businesses to shut out mothers or any prospective mother on the grounds of their supposed concerns over children's welfare or the mothers' reliability. (It might even change our housing patterns such that every home with children need not have its own "nursery", backyard, and tons of playthings and the space to keep them.) Thus, the provision of child care should be placed very high on the list of policy priorities.

BIBLIOGRAPHY

- Alpenfels, Ethel J. "Women in the Professional World." In American Women: The Changing Image, Beverly Casara (ed.), Boston: Beacon Press, 1962.
- Atkinson, John W. (ed.) Motives in Fantasy, Action and Society. Princeton, New Jersey: D. VanNostrand Co., 1958.
- Baruch, Rhoda. "The Achievement Motive in Women: Implications for Career Development," Journal of Personality and Social Psychology, 1967, 5 (3), 260-267.
- Caplow, Theodore and McGee, R. J. Academic Marketplace. New York: Basic Books, 1958.
- Cross, Patricia. The woman student. In Women in higher education, W. T. Furniss and P. A. Graham, (eds.), Washington, D. C.: American Council on Education, 1972, pp. 29-49.
- French, Elizabeth G. and Lesser, Gerald S. "Some Characteristics of Achievement Motivation in Women," Journal of Abnormal and Social Psychology, 1964, 68 (2), 119-128.
- Furniss, W. Todd and Graham, Patricia A. (eds.) Women in higher education, Washington, D. C.: American Council on Education, 1972.
- Gross, Ellen E. Patterns of achievement gratification and felt distress in mothers of preschool-age children. B.A. Honors thesis, The University of Michigan, 1969.
- Horner, Matina. "Toward an understanding of achievement-related conflicts in women," Journal of Social Issues, 1972, 28 (2), 157-176.
- Lesser, Gerald S., Krawitz, Rhoda N., and Packard, Rita. "Experimental Arousal of Achievement Motivation in Adolescent Girls," Journal of Abnormal and Social Psychology, 1963, 66 (1), 59-66.
- Lewis, Judith A. (ed.) Women and counselors. Special issue of The Personnel and Guidance Journal, 1972, 51 (2).
- Lipinski, Beatrice Grace. "Sex-Role Conflict and Achievement Motivation in College Women," Ph.D. thesis, University of Cincinnati, 1965.

- Matthews, Esther and Tiedeman, David V. "Attitudes Toward Career and Marriage and the Development of Life Style in Young Women," Journal of Counseling Psychology, 1964, 11 (4), 375-384.
- McClelland, David C. The Achieving Society. Princeton, New Jersey: D. VanNostrand Co., 1961.
- Mednick, Martha S., Tangri, Sandra S., and Hoffman, Lois W. (eds.) Women: Social psychological perspectives on motivation and achievement. New York: Holt, Rinehart, & Winston, 1975.
- Mednick, Martha S. and Tangri, Sandra S. (eds.) New Perspectives on Women. The Journal of Social Issues, 1972, 28 (2).
- Morgan, James. "The Achievement Motive and Economic Behavior," Economic Development and Cultural Change, 1964, 12 (3), 243-267.
- Morgan, James N., Sirageldin, Ismail A., Baerwaldt, Nancy. Productive Americans. Ann Arbor, Michigan: Institute for Social Research, 1966.
- President's Commission on the Status of Women. American Women. Washington, D. C., 1963.
- Radcliffe Committee on Graduate Education for Women. Graduate Education for Women. The Radcliffe Ph.D. Cambridge, Mass.: Harvard University Press, 1956.
- Roby, Pamela. "Institutional barriers to women students in higher education." In Academic women on the move, Alice S. Rossi and Ann Calderwood (eds.), New York: Russell Sage Foundation, 1973, pp. 37-56.
- Rossi, Alice. "Barriers to the Career Choice of Engineering, Medicine, or Science Among American Women," in Women and the Scientific Professions, Mattfeld, J. A. and Van Aken, C. G. (eds.), Cambridge, Mass.: The MIT Press, 1965, pp. 51-127.
- Rossi, Alice and Calderwood, Ann (eds.) Academic women on the move. New York: Russell Sage Foundation, 1973.
- Sundheim, Betty J. M. "The Relationships Among 'n' Achievement, 'n' Affiliation, Sex-Role Concepts, Academic Grades, and Curricular Choice," Dissertation Abstracts, 1963, 23 (9), 3471.
- Super, Donald. The Psychology of Careers. New York: Harper and Bros., 1957.

Tangri, Sandra S. "Implied Demand Character of the Wife's Future" and Role-Innovation: Patterns of Achievement Orientation among Women. JSAS Catalog of Selected Documents in Psychology Winter 1974, 4, p. 12.

Turner, Ralph H. "Some Aspects of Women's Ambition," American Journal of Sociology, 1964, 70 (3), 271-285.

U. S. Department of Labor. First Jobs of College Women. Women's Bureau Bulletin No. 268, Washington, D. C., 1959.

U. S. Department of Labor. 1965 Handbook on Women Workers. Women's Bureau Bulletin No. 290, Washington, D. C., 1965.

Veroff, Joseph, Wilcox, Sue and Atkinson, J. W. "The Achievement Motive in High School and College Age Women," Journal of Abnormal and Social Psychology, 1953, 48, 108-119.

APPENDIX A

1970 QUESTIONNAIRE

- 1 -

Today's Date: _____

First,

When did you finish your B.A.?

Month and Year

What was your academic major when you finished?

And what is your present major activity?
That is, what takes most of your time right now,
or what are you doing that is most important to you?

Now, we would like to "catch up" with what you have been doing in the way of further studies since 1967.

Put a checkmark or "X" through the circles that apply to you.

1. Are you in school now?

☐ Yes --- Go on to Question 2, next page

☐ No

(IF NOT) 1a. Have you attended any kind of educational institution since 1967?

☐ Yes --- Go on to Question 2, next page

☐ No --- Skip to Question 8, page 5

FOR THOSE WHO HAVE ATTENDED SCHOOL SINCE 1967

2. What kind of studies have you done since 1967? (CHECK AND COMPLETE ALL THAT APPLY)

☐ Graduate School

What field did you study? If you changed fields, list the fields in the order in which you entered them, whether you studied full-time, half-time or less, and what degree you were working for, if any. If you have taken only one seminar in an area, put an (S) after the title of the seminar.

<u>Field</u>	Full, 1/2, 1/4- Time; (S)	When?		Degree Com- pleted	Degree Worked For	Not Inter- ested in Degree
		From	To			
a) _____	_____	_____	_____	_____	_____	0
b) _____	_____	_____	_____	_____	_____	0
c) _____	_____	_____	_____	_____	_____	0

☐ Professional School

Field? _____ 0

☐ Business School

Field? _____ 0

☐ Other

What? _____ 0

3. Did you start further studies directly after finishing your B.A.?

- ☐ Yes, I started directly after finishing my B.A. (or B.S.)
- ☐ No, I worked for a while first, then started
- ☐ No, I traveled for a while first, then started
- ☐ No, I did something else for a while, then started

3a. What did you do? _____

3b. If you did not start further studies directly after finishing your B.A., what was the reason?

GO ON TO Q.4

FOR THOSE WHO HAVE ATTENDED SCHOOL SINCE 1967 (CONTINUED)

4. Have there been a large number of women taking the same courses you are taking or have there been very few? In terms of percentages, would you say that:

- ☐ Women make up 5% or less of my classmates
- ☐ Between 6 and 15% of my classmates are women
- ☐ Between 16 and 30% of my classmates are women
- ☐ Between 31 and 40% of my classmates are women
- ☐ About half of my classmates are women
- ☐ More than half of my classmates are women

5. Is this about the proportion of women you expected in your classes, or more, or less?

- ☐ About what I expected
- ☐ More than I expected
- ☐ Less than I expected

THOSE NOT IN SCHOOL NOW, SKIP TO Q.7, PAGE 5

FOR THOSE WHO ARE IN SCHOOL NOW

6. Sometimes what a person studies is a compromise with what they would really prefer to study. How about you? Does what you are studying now represent a compromise at all?

- ☐ No, it does not represent a compromise
- ☐ Yes, it's a bit of a compromise
- ☐ Yes, it's very much a compromise

(IF YES) 6a. What kinds of things made the compromise necessary?

6b. What would you really prefer to be studying if this compromise were not necessary?

6c. Do you think you will someday be able to study what you really prefer?

- ☐ Yes, I think I will soon be studying what I prefer
- ☐ Perhaps someday I will study what I prefer
- ☐ No, I will probably never study what I prefer

SKIP TO Q.13, PAGE 6

FOR THOSE WHO HAVE ATTENDED SCHOOL SINCE 1967 BUT ARE NOT IN SCHOOL NOW

7. Sometimes what a person studies is a compromise with what they would really prefer to study. How about you? Did your post-B.A. studies represent a compromise at all?

- ☐ No, it did not represent a compromise
- ☐ Yes, it was a bit of a compromise
- ☐ Yes, it was very much a compromise

(IF YES) 7a. What kinds of things made the compromise necessary?

7b. What would you have really preferred to study if this compromise were not necessary?

7c. Do you think you will someday be able to study what you really prefer?

- ☐ Yes, I think I will soon be studying what I prefer
- ☐ Perhaps someday I will study what I prefer
- ☐ No, I will probably never study what I prefer

GO ON TO THE NEXT QUESTION

FOR ALL THOSE WHO ARE NOT IN SCHOOL NOW

8. Do you expect to continue your education in a graduate, professional or business school sometime in the future?

- ☐ Definitely yes
 - ☐ Probably yes
 - ☐ Probably not
 - ☐ Definitely not
 - ☐ Don't know
- Answer Questions 9 through 12
- Skip to Question 13

9. In what year do you think you will go back to school? _____

10. What do you think will be your field of study?

GO ON TO Q.11

FOR ALL THOSE WHO ARE NOT IN SCHOOL NOW (CONTINUED)

11. How certain are you that this will be your field of study?

- ☐ Quite certain
- ☐ Fairly certain, but possibly subject to change
- ☐ Fairly uncertain

12. What degree will you want to get, if any? _____

GO ON TO Q.13

EVERYONE SHOULD ANSWER THE REMAINING QUESTIONS IN THIS SECTION

13. Have you changed fields since graduating?

- ☐ Yes
- ☐ No

(IF YES) 13a. What was the reason? (CHECK ALL THAT APPLY)

- ☐ I had been planning to do this even before graduating
- ☐ I wasn't really sure what I wanted to do then
- ☐ I didn't like my previous field as much as I thought I would
- ☐ I took someone's advice. Whose? _____
- ☐ Practical considerations made it necessary for me to change fields

Please explain: _____

☐ Other: _____

14. Have you changed your mind since graduating about the academic degree you want to get?

- ☐ Yes
- ☐ No

(IF YES) 14a. Why have you changed your mind?

15. Has anything happened to you in the last three years which has increased your desire to obtain further education or training?
(CHECK ALL THAT APPLY)

- ☐ Better job opportunities for people with more training
 - ☐ Demands of my job make more training desirable or necessary
 - ☐ I am clearer about my own goals
 - ☐ It's hard for women to get ahead in my field unless they have more training than the men
 - ☐ Everything I do makes me want to know more
 - ☐ I changed fields
 - ☐ I want to be more independent, and education helps
 - ☐ Other:
-

- ☐ Nothing has increased my desire for further education or training

16. Has anything happened to you in the last three years which has decreased your desire to obtain further education or training?
(CHECK ALL THAT APPLY)

- ☐ Getting tired of school
 - ☐ Getting married makes going to school more difficult
 - ☐ The graduate courses I have taken were disappointing
 - ☐ Getting an M.A. would not be enough for the jobs I'd like, and I'm not willing to go for a Ph.D.
 - ☐ Additional schooling would take me into aspects of my field which I do not find attractive.
 - ☐ I would not be allowed to take the courses which really interest me because of graduate school regulations
 - ☐ Responsibilities other than marriage
Please explain:
-

- ☐ Experiences since getting my B.A. have led me to question the value of additional schooling to my personal goals
 - ☐ Other:
-

- ☐ Nothing has decreased my desire for further education or training

17. Do you feel you have had any special difficulties in planning or pursuing your post-B.A. education because of being a woman? That is, for example, any difficulty in being admitted to the school of your choice; in getting financial assistance; being counselled; participating in class-related or social activities; in the attitudes of classmates or instructors; being graded, etc.?

☐ Yes
☐ No

(IF YES) 17a. Describe in detail the kind of difficulty or difficulties which you encountered.

18. Do you feel you have had any special advantages in planning or pursuing your post-B.A. education because of being a woman? That is, for example, any advantages in being admitted to the school of your choice; in getting financial assistance; being counselled; participating in class-related or social activities; in the attitudes of classmates or instructors; being graded, etc.?

☐ Yes
☐ No

(IF YES) 18a. Describe what happened or what the circumstances were that lead you to think so.

19. Do you think women in general have any special difficulties in pursuing further education? (CHECK ALL THAT YOU FEEL APPLY)
- ☐ Women's chances of being accepted into graduate school are less than men's
 - ☐ Women's chances of getting financial assistance (like fellowships, assistantships, loans, etc.) are less than men's
 - ☐ Some professors do not want to take on women graduate students
 - ☐ Women have to do better than men to get the same consideration
 - ☐ Women get left out of the informal occasions when helpful exchanges of information and opinion take place
 - ☐ Getting married and having children introduce more uncertainties into a woman's life than a man's, making it harder for her to plan her studies
 - ☐ In some fields, women are uncomfortable because of the attitudes of their classmates and/or their professors
 - ☐ Some schools or departments will not accept part-time students and this often prevents a married woman or mother from going to school
 - ☐ A husband's disapproval is more likely to keep his wife out of school, than the reverse
 - ☐ A woman who is very bright worries about the consequences of outshining her male colleagues
 - ☐ Other: _____
-
- ☐ No, I don't think women in general have any special difficulties in pursuing further education
- 19a. Do you personally know women who have had such difficulties (other than yourself)?
- ☐ Yes
 - ☐ No

20. Do you think women in general have any special advantages in pursuing further education?

- ☐ Yes
- ☐ Only in women's fields (like Nursing, Phys.Ed. for Women, etc.)
- ☐ No

(IF YES) 20a. What advantages do you think they have?

FOR THOSE WHO FEEL THAT WOMEN HAVE BOTH SPECIAL DIFFICULTIES AND
SPECIAL ADVANTAGES IN PURSUING FURTHER EDUCATION

21. Do you think that in general the advantages outweigh the difficulties, or vice-versa?

- ☐ The difficulties outweigh the advantages
- ☐ The advantages outweigh the difficulties
- ☐ I think they balance out

Now we would like to ask you about jobs you have held since getting your B.A.

22. Have you changed your mind about your occupational goals since graduating from Michigan?

- ☐ Yes
☐ No

(IF YES) 22A. What was your goal then, what is it now, and why did you change?

a. Before graduating I wanted to _____

b. Now I want to _____

c. I changed because _____

23. Are you employed now?

- ☐ Yes --- Go on to Q.24
☐ No

(IF NOT) 23a. Have you been employed since graduation?

- ☐ Yes --- Go on to Q.24
☐ No --- Skip to Q.36 on page 18

FOR THOSE WHO HAVE BEEN EMPLOYED SINCE GRADUATION

24. What jobs have you held since graduating? Please describe them briefly, starting with the first job you took after graduation, the period of employment, and whether it was (or is) part-time or full-time. The last job listed should be the last one you held or the one you are on now. If you have held more than four jobs, list only the last four. Please be specific, for example, if teaching, state what grade and subject.

	From	To	Part Time	Full Time
#1 _____	_____	_____	0	0
#2 _____	_____	_____	0	0
#3 _____	_____	_____	0	0
#4 _____	_____	_____	0	0

GO ON TO Q.25

FOR THOSE WHO HAVE BEEN EMPLOYED SINCE GRADUATION (CONTINUED)

25. How did you get each of the jobs you've listed? (PLEASE CHECK ALL THAT APPLY)

Through:	Job #1	Job #2	Job #3	Job #4
University of Michigan Placement Service	0	0	0	0
My major Department at Michigan	0	0	0	0
A Professor in my major Department at Michigan	0	0	0	0
A Professor not in my major Department	0	0	0	0
A friend at Michigan	0	0	0	0
A friend not from Michigan	0	0	0	0
A relative	0	0	0	0
My husband	0	0	0	0
A public employment agency	0	0	0	0
A private employment agency	0	0	0	0
An ad in the paper	0	0	0	0
My previous job	0	0	0	0
I approached the employer myself	0	0	0	0
Other:	0	0	0	0

26. For each job you left, could you briefly explain why you left?

Job #1: _____

Job #2: _____

Job #3: _____

Job #4: _____

IF YOU ARE NOT EMPLOYED NOW, SKIP TO Q.32
BOTTOM OF PAGE 16

FOR THOSE WHO ARE EMPLOYED NOW

27. Are you satisfied with your job?

- ☐ Very satisfied
- ☐ Fairly satisfied
- ☐ Not very satisfied
- ☐ Not at all satisfied

28. Would you be interested in being promoted where you work now?

- ☐ Yes
- ☐ No
- ☐ There are no positions above mine - the question does not apply to my situation
- ☐ Other:

(IF YES) 28a. What do you think are your chances of being promoted?

- ☐ Excellent
- ☐ Good
- ☐ Fair
- ☐ Poor

28b. Why do you think so?

GO ON TO Q. 29

FOR THOSE WHO ARE EMPLOYED NOW (CONTINUED)

29. To what extent do any of the following contribute to your satisfactions with your job? (CHECK ONE CIRCLE FOR EACH SOURCE OF SATISFACTION)	A major source of satisfaction	A source of some satisfaction	This doesn't contribute to my satisfaction with my job
a) My job demands a lot from me - not just physically, but especially in other ways.	0	0	0
b) There is no-one sitting in judgement of me. I have to meet my own standards, not someone else's, most of the time.	0	0	0
c) The job I have meets some of my basic practical requirements in terms of salary, hours, and/or location.	0	0	0
d) There are aspects to my job which are unknown, untried. I might have to risk failure to come up eventually with a success.	0	0	0
e) The people that work with me make this job satisfying. They are intelligent, interesting, sympathetic.	0	0	0
f) There is substantial challenge in this job - it is necessary to grow in this job to keep up with it.	0	0	0
g) The setting in which I work is good: well-organized, fairly well-financed, adequately staffed.	0	0	0
h) In my job, I work with people rather than things.	0	0	0

GO ON TO Q. 30

FOR THOSE WHO ARE EMPLOYED NOW (CONTINUED)

30. To what extent do you wish each of the following were more true of your work?

	I would <u>very much</u> like this to be more true of my work	It would be nice if this were more true of my work	I would <u>not</u> like this to be more true of my work
a) My job demands a lot from me - not just physically, but especially in other ways.	0	0	0
b) There is no-one sitting in judgement of me. I have to meet my own standards, not someone else's, most of the time.	0	0	0
c) The job I have meets some of my basic practical requirements in terms of salary, hours, and/or location.	0	0	0
d) There are aspects to my job which are unknown, untried. I might have to risk failure to come up eventually with a success.	0	0	0
e) The people that work with me make this job satisfying. They are intelligent, interesting, sympathetic.	0	0	0
f) There is substantial challenge in this job - it is necessary to grow in this job to keep up with it.	0	0	0
g) The setting in which I work is good: well-organized, fairly well-financed, adequately staffed.	0	0	0
h) In my job, I work with people rather than things.	0	0	0

GO ON TO Q. 31

FOR THOSE WHO ARE EMPLOYED NOW (CONTINUED)

31. Sometimes the job a person has is a compromise with what they would really prefer to do. How about you? Does your present job represent a compromise at all?

- ☐ No, it does not represent a compromise
- ☐ Yes, it's a bit of a compromise
- ☐ Yes, it's very much of a compromise

(IF YES) 31a. What kinds of things made the compromise necessary?

31b. What kind of job would you really prefer if this compromise were not necessary?

31c. Do you think you will someday have the kind of job you really prefer?

- ☐ Yes, I think I will soon have the kind of job I prefer
- ☐ Perhaps someday I will have the kind of job I prefer
- ☐ No, I will probably never have the kind of job I prefer

SKIP TO Q. 36 , PAGE 18

FOR THOSE WHO HAVE BEEN EMPLOYED SINCE GRADUATING BUT ARE NOT NOW

32. Were you satisfied with your last job?

- ☐ Very satisfied
- ☐ Fairly satisfied
- ☐ Not very satisfied
- ☐ Not at all satisfied

GO ON TO Q. 33

FOR THOSE WHO HAVE BEEN EMPLOYED SINCE GRADUATING BUT ARE NOT NOW
(CONTINUED)

33. What, if anything, did you like about your last job? What aspects did you find satisfying?

34. What, if anything, did you dislike about your last job? What aspects did you find dissatisfying?

35. Sometimes the job a person has is a compromise with what they would really prefer to do. How about you? Did your last job represent a compromise at all?

- ☐ No, it did not represent a compromise
- ☐ Yes, it was a bit of a compromise
- ☐ Yes, it was very much of a compromise

(IF YES) 35a. What kinds of things made the compromise necessary?

35b. What kind of job would you really have preferred if this compromise were not necessary?

35c. Do you think you will someday have the kind of job you really prefer?

- ☐ Yes, I think I will soon have the kind of job I prefer
- ☐ Perhaps someday I will have the kind of job I prefer
- ☐ No, I will probably never have the kind of job I prefer

GO ON TO Q.36

36. Would you like another job now?

☐ Yes

(IF YES) 36a. Are you now actively looking for a job?

☐ Yes --- Go on to Q.37

☐ No

(IF NOT) Why? _____

GO ON TO Q.37

☐ No

(IF NOT) 36b. Would you like another job eventually?

☐ Yes

(IF YES) When? _____

GO ON TO Q.37

☐ No --- Skip to Q.38

FOR THOSE WHO WOULD LIKE ANOTHER JOB

37. Could you describe what kind of job you would like? That is, what would the job have to offer you for you to be willing to take it? If you are working now, or have worked, how would the new job differ from the one you now have or the last job you had?

GO ON TO Q.38

38. Do you feel that any of the following have kept you from getting the jobs or training you wanted? (CHECK ALL THAT APPLY IN EACH COLUMN)

	Kept me from jobs I wanted	Kept me from training I wanted
Financial obstacles	0	0
Indecision or hesitation on my part	0	0
Took the wrong courses in college	0	0
The necessary courses weren't available	0	0
My grades in college weren't good enough	0	0
Certain persons discouraged me		
Who? _____	0	0
I had the qualifications but needed some encouragement	0	0
I felt unsure of my ability to do it	0	0
Anti-nepotism rules in the University	0	0
Anti-nepotism rules in the Government	0	0
Anti-nepotism rules in business	0	0
Discrimination		
On what basis? _____	0	0
I didn't try hard enough	0	0
Other: _____	0	0
Nothing has kept me from the jobs or training I wanted	0	0

39. Has anything happened to you in the last three years which has increased your desire to work? If yes, what is that? (CHECK ALL THAT APPLY)

- ☐ It's nice to have the income
- ☐ The work itself is more enjoyable than I expected
- ☐ My husband wants me to work
- ☐ Disappointment with a romantic relationship
- ☐ Want to help others avoid the mistakes I made
- ☐ The job opportunities are better than I expected
- ☐ I am tired of going to school
- ☐ I have a greater desire to prove myself and what I can do
- ☐ I like having the responsibility that I have in my work
- ☐ Other: _____
- ☐ Nothing has increased my desire to work

40. Has anything happened to you in the last three years which has decreased your desire to work? If yes, what is that? (CHECK ALL THAT APPLY)

- ☐ The income isn't very good
- ☐ I can't get the jobs I want
- ☐ I can't get the promotions I want
- ☐ I do not enjoy the work as much as I thought I would
- ☐ My husband doesn't want me to work
- ☐ The responsibilities of marriage make working harder
- ☐ The responsibilities of having children make working harder
- ☐ I would like to get married and quit working
- ☐ I would like to start my family now
- ☐ It is very tiring - I feel under too much pressure
- ☐ I don't get to do things around the house as much as I'd like to
- ☐ I would like to stay home with my children more
- ☐ I've satisfied myself that I can do it

☐ Other: _____

☐ Nothing has decreased my desire to work

41. Do you feel that you have had any special difficulties in getting the jobs you want, or in getting raises or promotions, or participating in any activities which generally go along with your job, because of being a woman?

☐ Yes
☐ No

(IF YES) 41a. Describe in detail the kind of difficulty or difficulties which you encountered.

42. Do you feel that you have had any special advantages in getting the jobs you want, or in getting raises or promotions, or participating in any activities which generally go along with your job, because of being a woman?

☐ Yes
☐ No

(IF YES) 42a. Describe what happened or what the circumstances were that lead you to think so.

43. Do you think that women in general have any special difficulties in the work world because of being a woman? (CHECK ALL THAT APPLY)

- ☐ Women are not considered permanent employees so employers are more reluctant to hire them
 - ☐ Women are barred from top management positions
 - ☐ Women are barred from management functions which deal with the public
 - ☐ Women are paid less than men for doing the same jobs
 - ☐ Women have to put in more years than men to get the same salary
 - ☐ Women have more difficulty being promoted
 - ☐ Women have more difficulty getting raises
 - ☐ Some places put a ceiling on women's salaries
 - ☐ Women often do not get the credit for the work they've done
 - ☐ Men are prejudiced against having women in business other than as secretaries or assistants
 - ☐ Women are prejudiced against women
 - ☐ Policies discriminate against women
 - ☐ The image of women as emotional, not capable, not interested , and not knowledgeable keeps women out of certain jobs
 - ☐ Women are not thought capable of handling crisis situations
 - ☐ Women are particularly discriminated against in certain fields like law, medicine, and politics
 - ☐ Men teachers are preferred over women in elementary schools
 - ☐ Women are excluded from the "cameraderie" of male associates
 - ☐ Women have less self-confidence than men
 - ☐ Other: _____
-
- ☐ No, I don't think women in general have any special difficulties in the work world because of being women

43a. Do you personally know women who have had such difficulties (other than yourself)?

- ☐ Yes
- ☐ No

44. Do you think that women in general have any special advantages in the work world because of being a woman?

- ☐ Yes
- ☐ Only in women's occupations
- ☐ No

(IF YES) 44a. What advantages do you think they have?

FOR THOSE WHO FEEL THAT WOMEN HAVE BOTH SPECIAL ADVANTAGES AND
SPECIAL DIFFICULTIES IN THE WORK WORLD

45. Do you think that in general the advantages outweigh the difficulties, or vice-versa?

- ☐ The difficulties outweigh the advantages
- ☐ The advantages outweigh the difficulties
- ☐ I think they balance out

FOR THOSE WHO HAVE BEEN EMPLOYED SINCE GRADUATION

46. Could you estimate what proportion of the persons doing the same job as yourself where you worked, have been women?

Proportion of persons in same job capacity as myself who were women

	<u>5% or less</u>	<u>6-15%</u>	<u>16-30%</u>	<u>31-40%</u>	<u>About 50%</u>	<u>More than 50%</u>
Job #1	0	0	0	0	0	0
Job #2	0	0	0	0	0	0
Job #3	0	0	0	0	0	0
Job #4	0	0	0	0	0	0

47. Was this about the sex-ratio which you expected would be in your occupation, or more women or less women than you expected?

	<u>More Women</u>	<u>About what I expected</u>	<u>Less Women</u>
Job #1	0	0	0
Job #2	0	0	0
Job #3	0	0	0
Job #4	0	0	0

48. Would you have liked there to be more women or more men doing this job?

	<u>Would have liked</u>			<u>Don't feel any reason for having more men or women on this job</u>
	<u>More Men (a)</u>	<u>More Women (b)</u>	<u>More Men and Women (c)</u>	
Job #1	0	0	0	0
(a,b,c) Why?	_____			
Job #2	0	0	0	0
(a,b,c) Why?	_____			
Job #3	0	0	0	0
(a,b,c) Why?	_____			
Job #4	0	0	0	0
(a,b,c) Why?	_____			

This next section of the questionnaire concerns marriage and family life.

49. Are you now --- ? (Check the appropriate circle)

☐ Married

What month and year did you get married? _____

Were you married before? ☐ Yes ☐ No

What does your husband do? (BE AS SPECIFIC AS POSSIBLE)

SKIP TO Q.52

☐ Engaged

What month and year did you become engaged? _____

Were you engaged before? ☐ Yes ☐ No

Have you ever been married? ☐ Yes ☐ No

What does your fiance' do? (BE AS SPECIFIC AS POSSIBLE)

☐ Going steady but not formally engaged

What month and year did you start going steady? _____

Have you ever been engaged? ☐ Yes ☐ No

Have you ever been married? ☐ Yes ☐ No

What does your steady do? (BE AS SPECIFIC AS POSSIBLE)

☐ None of the above

Have you ever been engaged? ☐ Yes ☐ No

Have you ever been married? ☐ Yes ☐ No

FOR THOSE WHO ARE NOT MARRIED

50. How soon would you like to get married?

☐ As soon as possible

☐ One or two years from now

☐ 3 or 4 years from now

☐ 5 to 10 years from now

☐ More than 10 years from now

☐ Don't want to get married

51. How soon after marriage would you like to start having children?

☐ As soon as possible

☐ One or two years after marriage

☐ 3 or 4 years after marriage

☐ 5 to 10 years after marriage

☐ More than 10 years after marriage

☐ Do not want to have children after marriage

IF NOT ENGAGED OR GOING STEADY, SKIP TO Q.56, P.27

FOR WOMEN WHO ARE MARRIED, ENGAGED, OR GOING STEADY

52. How did you meet your husband, fiance', or steady? (CHECK ALL THAT APPLY)

- ☐ Through friends
- ☐ At work:
 - ☐ He was my boss
 - ☐ I was his boss
 - ☐ Neither of the above
- ☐ In class:
 - ☐ He was my instructor
 - ☐ I was his instructor
 - ☐ We were taking the same course
- ☐ We taught the same course, or in the same Department
- ☐ In the co-op where I lived
- ☐ In the apartment house where I lived
- ☐ Through church or temple
- ☐ Through my sorority or his fraternity
- ☐ Through our political activities
- ☐ At a professional convention or association meeting
- ☐ Other:

53. What is the highest level of education he has completed? (CHECK ONE)

- ☐ Less than High School Diploma
- ☐ High School Diploma
- ☐ Some college
- ☐ B.A. or B.S.
- ☐ First professional degree (FOR EXAMPLE, D.D.S., M.D.)
- ☐ Some graduate work
- ☐ M.A. or M.S.
- ☐ Some graduate work beyond Master's level
- ☐ Candidate's degree
- ☐ Ph.D.

IF ENGAGED OR GOING STEADY, SKIP TO Q.56

FOR MARRIED WOMEN

54. How soon would you like to start having children? How soon would your husband like to start having children?

- | <u>Myself</u> | <u>Husband</u> | |
|-----------------------|-----------------------|------------------------------|
| ☐ | ☐ | As soon as possible |
| ☐ | ☐ | One or two years from now |
| ☐ | ☐ | 3 or 4 years from now |
| ☐ | ☐ | 5 to 10 years from now |
| ☐ | ☐ | More than 10 years from now |
| ☐ | ☐ | Do not want to have children |
| ☐ | ☐ | Already have children |

FOR MARRIED WOMEN WITH CHILDREN

55. How soon would you like to have another child? How soon would your husband like to have another child?

Myself

Husband

☐	☐	As soon as possible
☐	☐	One or two years from now
☐	☐	3 or 4 years from now
☐	☐	5 to 10 years from now
☐	☐	More than 10 years from now
☐	☐	Do not want to have any more children

THE FOLLOWING QUESTIONS ARE FOR EVERYONE

56. How do you feel about adopting children? (CHECK ONE)

- ☐ I would not consider adopting a child under any circumstances
- ☐ I would adopt children only if I couldn't have any of my own
- ☐ I would adopt children to have the number (or sex) I want, if I couldn't bear them all myself
- ☐ I would like to adopt children to have the number (or sex) I want, because I do not want to bear them all myself
- ☐ I have adopted a child but would not like to adopt any more
- ☐ I have adopted a child and would like to adopt another one
- ☐ I would prefer to adopt children to bearing any of my own
- ☐ Other:

56a. IF YOU WERE ADOPTED, PLEASE CHECK HERE ☐

57. How do you feel about abortion?

- ☐ I think a woman should have the right to decide what happens to her own body. She should be able to get an abortion if she wants one.
- ☐ I think it's a medical and personal decision to be made by the woman and her doctor, not to be regulated by law.
- ☐ I think a committee of doctors should have the responsibility for deciding on individual abortion cases.
- ☐ I think there should be more grounds for abortion than most present state laws allow, but lawful regulation of abortion is necessary.
- ☐ I think the only grounds for abortion should be rape, incest, or danger to the life of the mother.
- ☐ I feel all abortions are immoral and should be illegal.
- ☐ Other: _____

58. If you could have just the number of children you want, how many would you have and of what sex? (Excluding adoptions) _____

(MARRIED AND ENGAGED WOMEN ONLY) 58a. How many children does your husband want and of what sex? _____

59. How many children do you think you will actually have? _____

59a. IF THE NUMBER OF CHILDREN YOU EXPECT TO HAVE IS GREATER OR LESS THAN THE NUMBER YOU WOULD IDEALLY LIKE TO HAVE, What is the reason for the difference?

Now, we'd like you to think about the kind of people you would like your children to be.

60. How would you describe the kind of person you would want your daughter to be? What are the characteristics or qualities you think would be most important to you in your daughter?

61. How would you describe the kind of person you would want your son to be? What are the characteristics or qualities you think would be most important to you in your son?

The next several questions concern your fertility and adoptive history. We are interested in how a woman's experience with pregnancy and being a mother affects her planning and carrying out of other roles.

If you have ever been pregnant, go on to Question 63

If you have never been pregnant, skip to Question 66, page 31

FOR THOSE WHO HAVE EVER BEEN PREGNANT

63. PLEASE COMPLETE THE ITEMS THAT APPLY TO YOU

a. My first pregnancy ended on _____ with:
(date)

- ☐ the birth of a daughter
- ☐ the birth of a son
- ☐ a stillbirth
- ☐ a miscarriage in the _____ month
- ☐ an abortion in the _____ month

Was the timing of this pregnancy --- ? (CHECK ONE)

- ☐ Just right
- ☐ A little earlier than expected
- ☐ A lot earlier than expected
- ☐ Very poor
- ☐ Overdue

b. My second pregnancy ended on _____ with:
(date)

- ☐ the birth of a daughter
- ☐ the birth of a son
- ☐ a stillbirth
- ☐ a miscarriage in the _____ month
- ☐ an abortion in the _____ month

Was the timing of this pregnancy --- ? (CHECK ONE)

- ☐ Just right
- ☐ A little earlier than expected
- ☐ A lot earlier than expected
- ☐ Very poor
- ☐ Overdue

c. My third pregnancy ended on _____ with:
(date)

- ☐ the birth of a daughter
- ☐ the birth of a son
- ☐ a stillbirth
- ☐ a miscarriage in the _____ month
- ☐ an abortion in the _____ month

Was the timing of this pregnancy --- ? (CHECK ONE)

- ☐ Just right
- ☐ A little earlier than expected
- ☐ A lot earlier than expected
- ☐ Very poor
- ☐ Overdue

GO ON TO THE NEXT QUESTION

FOR THOSE WHO HAVE EVER BEEN PREGNANT (CONTINUED)

64. Have you ever put a child up for adoption?

- ☐ Yes
- ☐ No

(IF YES) 64a. Which pregnancy was that? (a,b,c above) _____

65. Have you ever lost a child after birth?

- ☐ Yes
- ☐ No

(IF YES) 65a. Which pregnancy was that? (a,b,c above) _____

66. Have you ever adopted a child?

- ☐ Yes
- ☐ No

(IF YES) a. When did you adopt the child? _____
(date)

b. How old was the child at the time of adoption?

c. Is this child a boy or a girl? ☐ Boy ☐ Girl

d. Why did you adopt? _____

67. Do you think you are pregnant now?

- ☐ No, I know I'm not
- ☐ No, I doubt it

☐ I might be

☐ I think I am

☐ Yes, I know I am. I am in my _____ month.

67a. Is the timing of this pregnancy --- ? (CHECK ONE)

- ☐ Just right
- ☐ A little earlier than expected
- ☐ A lot earlier than expected
- ☐ Very poor
- ☐ Overdue

68. Some people like to have things happen without having to do a lot of planning about it, others prefer planning things in advance. Which way do you feel about having children? Would you prefer letting nature take its course or would you prefer to decide in advance when to have them?

☐ I prefer to let nature take its course
☐ I prefer to plan when to have the first child at least
☐ I prefer to plan when to have all my children

THE NEXT QUESTION IS BEING ASKED OF BOTH MARRIED AND UNMARRIED WOMEN. IF YOU ARE NOT MARRIED, ANSWER AS IF YOU WERE MARRIED.

69. Suppose you and your husband did not want to have children or did not want to have a child right now. In terms of the chances of getting pregnant, how "safe" would you want to feel?

☐ 100% safe, or as close to that as possible
☐ Fairly sure I wouldn't get pregnant; say, better than 60% safe
☐ I don't feel very strongly about it, I'd take even chances

70. How much have you ever actually risked getting pregnant when you didn't want to?

☐ I have never taken any chances
☐ I took a chance once
☐ I have taken a few chances
☐ I have often felt that way

71. Have you ever had reason to think that it might be difficult for you to get pregnant?

☐ Yes
☐ No

(IF YES) 71a. Why have you thought so?

UNMARRIED WOMEN ONLY

72. Do you expect to work after you get married, before you have children? (CHECK ONE)

- ☐ Yes
- ☐ No
- ☐ Uncertain

THE FOLLOWING QUESTIONS ARE FOR EVERYONE

73. If you do have children, do you expect to work or return to school after you have children? (CHECK ONE)

- ☐ Yes
- ☐ No
- ☐ Uncertain
- ☐ I have already returned to work/school since having children

73a. What is your major reason for wanting or not wanting to work after you have children?

1) If you do want to work, check one of the following:

- ☐ I enjoy my work
- ☐ I would be bored if I didn't work
- ☐ I feel I ought to use my education in a job
- ☐ I would need the money
- ☐ Other: _____

11) If you do not want to work, check one of the following:

- ☐ I enjoy staying home
- ☐ It would be too difficult to work after having children
- ☐ I feel I ought to stay home with my children
- ☐ Other: _____

74. If you do go back to work or school after having children, when would you expect to go - we mean to a job that would take at least 15 or 20 hours a week? (CHECK ONE)

- ☐ Soon after the children are born
- ☐ When the children reach nursery school
- ☐ When the children reach kindergarten or 1st grade
- ☐ When the children go into junior high school
- ☐ When the children go into high school
- ☐ When the children go into college
- ☐ When the children leave home
- ☐ Do not expect to work after I have children
- (Mothers only) ☐ The box I checked above is when I actually did return to work

WORKING AND STUDENT MOTHERS ONLY

75. Where are your children and who takes care of them while you
are at work or in school? (PLEASE CHECK ALL THAT APPLY)

	<u>Number of Hours Per Week</u>	<u>Cost Per Week</u>
☐ a) Babysitter comes to my house	_____	_____
☐ b) I take them to babysitter's house	_____	_____
☐ c) A relative comes to my house	_____	_____
☐ d) I take them to relative's house	_____	_____
☐ e) I take them to nursery or kindergarten	_____	_____
☐ f) I exchange babysitting with another mother	_____	_____
☐ g) A friend comes to babysit	_____	_____
☐ h) Their father takes care of them	_____	_____
☐ i) Their older brother/sister takes care of them	_____	_____
☐ j) I take them with me and watch them myself	_____	_____
☐ k) They are on their own	_____	_____
☐ l) They go to the nursery where I work or study	_____	_____
☐ m) Other: _____	_____	_____

76. Does this person do housework for you too? (If you have indicated more than one arrangement above, please indicate by letter which ones your answers refer to.)

- | | |
|--|------------------------------------|
| ☐ No | Arrangement: (a, b, c, etc.) _____ |
| ☐ A little | Arrangement: (a, b, c, etc.) _____ |
| ☐ Quite a bit | Arrangement: (a, b, c, etc.) _____ |
| ☐ Most or all of it | Arrangement: (a, b, c, etc.) _____ |

77. How would you rate this arrangement? (If you have indicated more than one arrangement above, please indicate by letter which ones your answers refer to.)

- | | |
|---|--------------------|
| ☐ Excellent | Arrangement: _____ |
| ☐ Good | Arrangement: _____ |
| ☐ Satisfactory | Arrangement: _____ |
| ☐ Not Satisfactory | Arrangement: _____ |
| ☐ Poor | Arrangement: _____ |

78. What arrangement, if any, would you consider ideal for your children while you are at work or in school?
- _____
- _____

MOTHERS ONLY

- 78a. Do you know anyone who has this arrangement?

☐ Yes
☐ No

- 78b. How much do you think it would cost (on an hourly basis)? _____

- 78c. How certain are you of this cost?

☐ Very certain
☐ Fairly certain
☐ Not at all certain

- 78d. Do you think you would be able to pay for this service?

☐ Yes
☐ No
☐ Uncertain

79. Would the availability, at reasonable cost, of the arrangement you consider ideal affect your decision of whether to work, or how soon you would return to work, or how many hours you would work? (CHECK AND COMPLETE ALL THAT APPLY TO YOU)

If this arrangement were available at reasonable cost,

- ☐ I might change my mind about not working after having children
- ☐ I might return to work sooner after having children; perhaps when they (go into) _____
- ☐ I might work more than 20 hours per week; perhaps _____ hours per week
- ☐ It would not affect any of these decisions

80. If you were working or studying, how would you feel about having your child attend the kind of center that is available at reasonable cost in Sweden and Denmark, where mothers can have their children supervised by professionally qualified staff in an enriching environment and in small groups, for full or partial days according to the mother's preference?

☐ I would very much like my child to attend such a center
☐ I might like my child to attend such a center
☐ I don't think I would like my child to attend such a center
☐ I would not like my child to attend such a center

Any other reactions? _____

81. Would the availability of such a center, at reasonable cost, affect your decision of whether to work, or how soon you would return to work, or how many hours you would work? (CHECK AND COMPLETE ALL THAT APPLY TO YOU)

If this kind of center were available at reasonable cost,

☐ I might change my mind about not working after having children
☐ I might return to work sooner after having children; perhaps when they (go into) _____
☐ I might work more than 20 hours per week; perhaps _____ hours per week
☐ It would not affect any of these decisions

82. Would you like there to be babysitting or a nursery available for your children at your place of work or study?

☐ Yes
☐ No
☐ Uncertain

FOR ALL WORKING OR STUDENT WOMEN

83. Are there any costs created by your working or studying which are a problem or might even deter you from continuing?

- ☐ Yes
- ☐ No

(IF YES) 83a. What are those costs?

How much are they?

- ☐ Child care
- ☐ Transportation
- ☐ Housekeeping
- ☐ Other: _____

FOR MARRIED WOMEN ONLY

84. What help, if any, does your husband give you with the children or with household needs?

FOR MARRIED AND ENGAGED WOMEN

85. Which, if any, of the following do you think your husband would help with if you needed the time for studying or for your work? (CHECK ALL THAT APPLY)

- ☐ Doing the dishes
- ☐ Straightening up
- ☐ Making dinner
- ☐ Shopping for groceries
- ☐ Vacuuming and dusting
- ☐ Mopping the floors
- ☐ Waxing the floors
- ☐ Preparing for dinner guests or for a party
- ☐ Doing the laundry
- ☐ Taking care of the children
- ☐ Taking the children out
- ☐ Ironing
- ☐ Taking out the garbage
- ☐ Doing the household accounts
- ☐ Other: _____

☐ None of these things

FOR MOTHERS ONLY

86. Has being a mother made any difference in how you feel about marriage and having children?

☐ Yes

☐ No

(IF YES) 86a. In what way?

87. Has being a mother made any difference in how you feel about working and studying?

☐ Yes

☐ No

(IF YES) 87a. In what way?

FOR ALL MARRIED WOMEN

88. Has being married (aside from motherhood) made any difference in how you feel about marriage and having children?

- ☐ Yes
☐ No

(IF YES) 88a. In what way?

89. Has being married (aside from motherhood) made any difference in how you feel about working and studying?

- ☐ Yes
☐ No

(IF YES) 89a. In what way?

FOR WORKING AND STUDENT WIVES

90. Do you feel that your working or studying creates any stresses for your husband?

- ☐ Yes
- ☐ No

(IF YES) 90a. What kind of stresses?

91. Do you feel that your working or studying creates any benefits for your husband?

- ☐ Yes
- ☐ No

(IF YES) 91a. What kind of benefits?

THE FOLLOWING QUESTIONS ARE FOR EVERYONE

92. Do you think that women with children have any special difficulties in pursuing studies or in working because of having children which a man with children or a man or woman without children would not have?

☐ Yes
☐ No

(IF YES) 92a. What difficulties are those?

(IF YES) 92b. Do you personally know someone who has had such difficulties?

☐ Yes
☐ No

93. Do you think that married women have any special difficulties (aside from those connected with having children) in pursuing studies or in working which neither a married man nor a single man or woman would have?

☐ Yes
☐ No

(IF YES) 93a. What difficulties are those?

(IF YES) 93b. Do you personally know someone who has had such difficulties?

☐ Yes
☐ No

94. To what extent is the following true of you?

"I want and intend to have a career; my husband will have to take that for granted and adjust accordingly."

(CHECK ONE)

- ☐ Very true
- ☐ Somewhat true
- ☐ Not very true
- ☐ Not at all true

95. Do you feel any conflict between marriage and a career?

(CHECK ONE)

- ☐ Yes, I feel a strong conflict
- ☐ Yes, I feel some conflict
- ☐ No, I don't really want to get married
- ☐ No, I don't really want a career
- ☐ No, I want both but I feel no conflict

MARRIED AND ENGAGED WOMEN

96. How do you think your husband or fiance' would feel about your having a career?

- ☐ He would like the idea - he thinks it's a good idea for a woman to combine marriage and a career
- ☐ It would be all right with him - although he would feel it might cause some problems
- ☐ He would not like the idea - he doesn't think it's a good idea for a woman to combine marriage and a career
- ☐ It wouldn't matter to him one way or the other

96a. Why does he feel that way?

GO ON TO Q.97

The next several questions pose some hypothetical situations involving yourself and your (real or hypothetical) husband.

97. Suppose you and your husband were in different disciplines but interested in a problem on which both disciplines had bearing. (For instance, an economist and a sociologist might both be interested in population; a physician and a lawyer might both be interested in public health; a physicist and an engineer might both be interested in thermodynamics; a psychologist and an engineer might both be interested in computer programming.) How would you feel about working together on the same problems?

☐ I would very much like to do that
☐ I might be interested in doing that
☐ I would not like to do that

- 97a. Would you rather work independently, even on the same problems?

☐ Yes
☐ No
☐ Maybe

- 97b. Would you avoid working on the same problems as he is?

☐ Yes
☐ No
☐ Maybe

98. Suppose you and your husband were in the same or closely related disciplines and interested in the same problems. How would you feel about working together on it?

☐ I would very much like to do that
☐ I might be interested in doing that
☐ I would not like to do that

- 98a. Would you rather work independently, even on the same problems?

☐ Yes
☐ No
☐ Maybe

- 98b. Would you avoid working on the same problems as he is?

☐ Yes
☐ No
☐ Maybe

WOMEN WHO ARE MARRIED, ENGAGED, OR GOING STEADY

99. The following questions also deal with how your husband, fiancé' or steady feels about certain things. In each case, you are asked to judge what his reactions would be under the specified conditions. For some questions you will have to put yourself in a hypothetical situation and judge what you would expect his reaction to be. A favorable reaction means that he would like the situation, would be proud of you, would encourage you, etc. An unfavorable reaction means that he would not like the situation, would be upset, would discourage you either outright or in his general attitude.

A. Suppose you are in the same line of work or field of study as your husband (or steady). You have acquired more prestige and are considered better in this field than he is. How would he react?

- | | |
|--|--|
| ☐ Very favorably | ☐ Slightly unfavorably |
| ☐ Pretty favorably | ☐ Pretty unfavorably |
| ☐ Slightly favorably | ☐ Very unfavorably |

B. Suppose you have a career in some field other than your husband's. You have acquired prestige in your field (acclaim, high salary, etc.). How do you think he would react?

- | | |
|--|--|
| ☐ Very favorably | ☐ Slightly unfavorably |
| ☐ Pretty favorably | ☐ Pretty unfavorably |
| ☐ Slightly favorably | ☐ Very unfavorably |

C. Suppose you have a steady, full-time job outside the home which you enjoy. Sometimes you work overtime or bring your work home with you to get it done right. How would he react?

- | | |
|--|--|
| ☐ Very favorably | ☐ Slightly unfavorably |
| ☐ Pretty favorably | ☐ Pretty unfavorably |
| ☐ Slightly favorably | ☐ Very unfavorably |

D. Suppose you have decided to take a job inside the home in order to satisfy certain interests that you have outside the home. How do you think he would react?

- | | |
|--|--|
| ☐ Very favorably | ☐ Slightly unfavorably |
| ☐ Pretty favorably | ☐ Pretty unfavorably |
| ☐ Slightly favorably | ☐ Very unfavorably |

THE REMAINING QUESTIONS ARE FOR EVERYONE

100. About how much does each of the sources below contribute towards your present total income?

	<u>All or Nearly All</u>	<u>More Than Half</u>	<u>About Half</u>	<u>Less Than Half</u>	<u>None</u>
Parents	0	0	0	0	0
Husband's job	0	0	0	0	0
Husband's fellowship	0	0	0	0	0
Own job	0	0	0	0	0
Own fellowship	0	0	0	0	0
Savings	0	0	0	0	0
Loan(s)	0	0	0	0	0
Investments	0	0	0	0	0
Other:	0	0	0	0	0

Looking backward for a moment, we would like to ask you some questions about the so-called "generation gap," and about your reflections on your college experience.

First, suppose you were to compare your parents with your own ideal of what parents should be,

101. How would you rate your parents as parents?

<u>Mother</u>	<u>Father</u>	
0	0	Excellent
0	0	Good
0	0	Satisfactory
0	0	Poor

102. How would you rate your parents as spouses (to each other)?

<u>Mother</u>	<u>Father</u>	
0	0	Excellent
0	0	Good
0	0	Satisfactory
0	0	Poor

103. Would you say their marriage was --- ?

0	Excellent
0	Good
0	Satisfactory
0	Poor

104. How would you rate your parents as "citizens" - that is, their involvement in community affairs, church, political party, service organizations, etc.?

<u>Mother</u>	<u>Father</u>	
☐	☐	Excellent
☐	☐	Good
☐	☐	Satisfactory
☐	☐	Poor

105. How would you rate your parents as workers, in terms of doing
A their best and deriving satisfaction from their work?

<u>Mother</u>		<u>Father</u>		
<u>Home</u>	<u>Job</u>	<u>Home</u>	<u>Job</u>	
☐	☐	☐	☐	Excellent
☐	☐	☐	☐	Good
☐	☐	☐	☐	Satisfactory
☐	☐	☐	☐	Poor

a) What things added to your parent's satisfactions with their work? (CHECK ALL THAT APPLY)

	<u>Mother</u>	<u>Father</u>
Raising the children	☐	☐
Seeing the children do well	☐	☐
Being successful	☐	☐
Being able to innovate, to try out new things	☐	☐
Having spouse's approval	☐	☐
Feeling needed	☐	☐
Being able to help others	☐	☐
Having a position of authority	☐	☐
Working with people	☐	☐
The stimulation	☐	☐
Security	☐	☐
The income	☐	☐
Sense of fulfilling his/her duty	☐	☐
Trying to change things for the better	☐	☐
The atmosphere, the people, the surroundings	☐	☐
Opportunity to learn and grow	☐	☐
Using his/her mind	☐	☐
Satisfying his/her drive	☐	☐
Other:	☐	☐

b) What things added to your parent's dissatisfactions with their work? (CHECK ALL THAT APPLY)

	<u>Mother</u>	<u>Father</u>
Realized was too involved with the children	0	0
Wasn't doing what he/she really wanted to	0	0
Feeling responsible for children's failings	0	0
Not doing the job right	0	0
Too much work	0	0
Too many children	0	0
Not being able to do more	0	0
Disliked housework	0	0
The income	0	0
Unpleasant people to work with	0	0
Doesn't like teaching	0	0
Doesn't like working with people	0	0
Not having done as well as possible	0	0
Not having spouse's approval	0	0
Too many hours, difficult schedule	0	0
Conflict with supervisors, higher-ups	0	0
Feeling tied down	0	0
Other:	0	0

105. How would you rate your parents in terms of earnings?

B

<u>Mother</u>	<u>Father</u>	
0	0	Excellent
0	0	Good
0	0	Satisfactory
0	0	Poor

0 Mother spent little or no time working for wages

106. Now, looking back at these questions, in which of these aspects, if any, would you be satisfied to be like either of your parents? (CHECK ALL THAT APPLY)

<u>Mother</u>	<u>Father</u>	
0	0	As parent
0	0	As spouse
0	0	As citizen
0	0	As worker
0	0	As earner

Now, reflecting on your experience at college,

107. Do you feel you were adequately prepared for what you then thought you would be doing?

☐ Yes, and that is what I am doing now

☐ Yes, but I am doing something else now

☐ I didn't know what I wanted to do, but I feel I got a good background whether or not it provided me with skills I need right now

☐ I didn't know what I wanted to do, and I don't feel that what I got has much value to me today

☐ No, I was not adequately prepared for what I wanted to do, but I am doing it now anyway

☐ No, I was not adequately prepared for what I wanted to do, and I am doing something else now

108. Considering what you did as an undergraduate, do you wish you had spent your time somewhat differently (for instance, academically, or in your personal life, or otherwise) or made different decisions about some things than you did?

☐ Yes

☐ No

(IF YES) 108a. Please explain what you wish you had done differently

109. Did you ever have the feeling that your professors or junior instructors (like teaching fellows and lab instructors) had certain expectations about your academic performance which you either exceeded or failed to meet? (CHECK ONE CIRCLE IN EACH COLUMN)

	<u>Professors</u>	<u>Junior Instructors</u>
I think my academic performance exceeded their expectations	☐	☐
I think they were just satisfied with my performance	☐	☐
Some expected more, some less	☐	☐
I don't think they had expectations of individual students	☐	☐
I think they expected more of me	☐	☐
I don't know what they expected	☐	☐

110. Did you ever feel that the academic expectations or advice of any of the following persons were less demanding because you are a woman from what they would have been if you were a man? (CHECK ALL THAT APPLY)

- ☐ One or more male professors
☐ One or more female professors
☐ A male advisor or counselor
☐ A female advisor or counselor
☐ A male teaching fellow or lab instructor
☐ A female teaching fellow or lab instructor
☐ Some other person(s): In what position(s)?

☐ No one

IF YOU HAVE CHECKED ANY OF THE PERSONS ABOVE,

- 110a. Please state what field, or fields, of competence these persons represented (for example, Sociology, Math, English, Philosophy, etc.)

111. Did you ever receive particular encouragement from any of your professors, teaching fellows, lab instructors, clinical instructors, or critic teachers? (CHECK ALL THAT APPLY)

	NO	YES			
		A Woman	More Than One Woman	A Man	More Than One Man
Professor	0	0	0	0	0
Teaching Fellow	0	0	0	0	0
Lab Instructor	0	0	0	0	0
Clinical Instructor	0	0	0	0	0
Critic Teacher	0	0	0	0	0

Sometimes it is difficult for students in a large University like Michigan to see their professors or other instructors informally, outside the classroom context. We are interested in knowing whether you had such an opportunity, particularly with persons who encouraged you.

(IF YES)

- 111a. Did you ever see this person (or persons) socially; that is, in a context other than in connection with your academic relationship - for instance, on a date, at a party, at some organizational function, etc.?

Man Woman

- ☐ I went out with this person
☐ I went out with more than one of these men
☐ I saw this person (or persons) at parties 0 0
☐ I saw this person at non-academic functions of a University organization 0 0
☐ I saw this person at the functions of a non-University organization 0 0
☐ I never saw these persons in any context other than class-related activities 0 0

IF YOU DID SEE ANY OF THESE PERSONS SOCIALLY,

111b. Were any of them in the same field as your academic major?	<u>Man</u>	<u>Woman</u>
☐ Yes	330	0
☐ No		0

112. Did you have any professor, teaching fellow or lab instructor, clinical instructor or critic teacher, who you feel had a special influence on you? (CHECK ALL THAT APPLY)

	NO	YES			
		One Woman	More Than One Woman	A Man	More Than One Man
Professor	☐	☐	☐	☐	☐
Teaching Fellow	☐	☐	☐	☐	☐
Lab Instructor	☐	☐	☐	☐	☐
Clinical Instructor	☐	☐	☐	☐	☐
Critic Teacher	☐	☐	☐	☐	☐

(IF YES) 112a. Indicate the one person you feel had the most significant influence on you by circling the appropriate circle above.

112b. What was the nature of that influence? (CHECK ALL THAT APPLY)

- ☐ Aroused or increased my interest in a subject which became my major concern
- ☐ Gave me a new way of looking at certain academic subjects
- ☐ Gave me certain valuable skills for dealing with my subject matter
- ☐ Gave me confidence in my academic ability
- ☐ Introduced me to ways I could combine different interests or pursue an interest I thought was impractical
- ☐ Raised my level of aspiration
- ☐ Helped me come to terms with certain of my limitations without damaging my self-esteem
- ☐ Inspired me to work up to my fullest capacity
- ☐ Helped me out of a depression or confusion about personal affairs
- ☐ Other: _____

FOR WOMEN WHO ARE IN FIELDS IN WHICH MEN PREDOMINATE. THAT IS, MORE THAN HALF OF THE PROFESSION IS MALE (FOR EXAMPLE, MEDICINE, LAW, PHYSICS, MATH, PHILOSOPHY, ENGINEERING, BUSINESS, POLITICS, ECONOMICS, ARCHITECTURE, ETC.).

113. What or who got you interested in your field?

114. Few women enter these fields and even fewer stay in them. What do you think has made you one of the exceptions?

115. Have you heard about any activities or concerns associated with the new women's rights movement?

- ☐ Yes
☐ No

(IF YES) 115. How did you hear about it? (CHECK ALL THAT APPLY)

- ☐ TV news
☐ TV programs other than the news
☐ Radio news
☐ Radio programs other than the news
☐ Newspaper
☐ Magazines: Which ones? _____

☐ Because of their activities on my campus
☐ From friends on my campus
☐ From friends on other campuses
☐ Off-campus friends
☐ At work
☐ By attending some of their activities
☐ By helping to organize the movement
☐ Other: _____

116. Which organizations have you heard about and how much have you heard about each of them?

	A Great Deal	A Fair Amount	Some
(a) _____	0	0	0
(b) _____	0	0	0
(c) _____	0	0	0
(d) _____	0	0	0
(e) _____	0	0	0

Now we'd like to ask you how you feel about these organizations, which have some things in common and some differences.

117. All of the groups in this movement want child-care centers, changes in the law regarding abortion, and equal pay for equal work.

Some of the organizations want all laws about abortion repealed; a new family structure or none at all; abolition of all forms of discrimination against women; doing away with Mother's Day and beauty contests among other practices which they feel glorify and exploit an image of women as sex objects and consumers; and they want to arouse and educate women on these issues. They emphasize replacing the present economic and political system with a socialist system in which men as well as women should be free to choose the roles they want. These groups employ the tactic of demonstration as well as disruption.

Some of the other organizations also share most of these goals: repeal of all abortion laws; equal opportunities for women in employment, education, politics, and religion; freedom of choice of roles for men and women; complete desegregation of public facilities like bars, restaurants, and hotels; and a less stereotyped image of women in the mass media. These groups emphasize the opening up of previously male-dominated spheres to women, rather than transformation of the total system, and their tactics include legal action in court, writing campaigns and demonstrations (but not disruption).

A third kind of organization is interested only in reform (not repeal) of abortion laws, equal pay for equal work (but not opening all occupations and roles to men and women alike), and child-care centers. The only tactic they endorse is persuasion of men through traditionally feminine means.

Which of the three kinds of organizations, if any, do you feel best represents your feelings (first, second, or third)?

- 118 . If none of these groups represents your own feelings very well, what do you think about these issues?

119. Finally, have there been any obstacles or difficulties in your working or doing the kind of work or studies you want to do which you haven't mentioned so far?

☐ Yes

☐ No

(IF YES) 120a. What are those? _____

120. Do you anticipate having any such difficulties in the future?

☐ Yes

☐ No

(IF YES) 120a. What are those? _____

Our last question is about the future

121. As you think of your future life, what is your picture of the way you'd like life to work out for you?

THANK YOU VERY MUCH FOR YOUR HELP

APPENDIX B

SUMMARY OF RESULTS FROM 1967 STUDY

CHAPTER VIII¹

This analysis was designed to discover what background, personality, or college experience characteristics might explain women's choice of occupations now dominated by men. Such a choice is referred to here as Role-Innovation and is measured simply by the sex-ratio in the occupation chosen by the woman at the time of her graduation from The University of Michigan. The greater the proportion of men in the occupation, the higher the Role-Innovation score.

The analyses described in this chapter are based on a sub-sample of 200 women seniors, chosen from the approximately 350 women who were part of our cohort that entered the university in 1963 and were administered questionnaires as seniors in 1967. The 200 were selected as follows. Using their choice of occupation as stated in their senior year questionnaires, all the women were classified as Role-Innovators (occupations with fewer than 30% women in them), "Moderates" (occupations with 30% to 50% women in them), and Traditionals (occupations with more than 50% women). Using this classification, approximately one in five of the 350 women fell into the innovator and moderate categories, and three of five into the traditional. All of the 65 role-innovators and 66 moderates were included in this study, and a random sample of 69 traditionals was selected for inclusion. Therefore, the final sample of 200 consists of one-third role innovators, one-third moderates, and one-third traditionals.

Most of the data in these analyses come from the extensive questionnaires given to these students in their senior year (Appendix B). In addition, it was possible to get 118 of these 200 women to take additional projective tests to measure some personality variables of particular concern in this study of occupational choice among college women (nAch and Motive to Avoid Success).

Other Occupation-Related Choices

In addition to the proportion of women in the occupation, another aspect of occupational choice considered part of role-innovation is the woman's commitment to the occupation, as expressed in her intention to work after, marriage, after having children, and how soon she would return to work after having children.

A series of other occupation-related choices were also examined for possible trends during the college period and for consistency among such choices. The process of occupational choice is treated as a sequence of choices which can all be identified in an identical manner. The choice of first and, where relevant, second undergraduate major; first and second graduate field of study; first and second occupational choice; and for the women who felt that their occupational choice represented a compromise of some kind, the occupation which they would in fact prefer

¹Adapted from Tangri (1969) for A Study of Students in a Multiversity (Gurin, 1971).

to enter, can be represented by the relevant sex-ratio. In addition, a qualitative distinction was made between masculine and feminine fields as follows: physical science, math, law-business-government, and life science were considered "masculine;" and social science, humanities, and education were considered "feminine."

Using these measures, several interesting features of the occupational choice process were discovered. For the sample as a whole, First Occupation is the most feminine choice made, and Preferred Occupation is the most masculine choice made. But for Innovators alone, Second rather than First Occupation is the most feminine, and they are less likely to feel that their First Occupation is a compromise. The difference in sex-ratio between these two choices is greatest for the Traditionals. Looking at the choice points named above as a sequence, there is a clear "feminizing" trend for the sample as a whole through the college period, using either the statistical or the qualitative definition of sex-typing. What seems to occur in the decisions made during the four years in college is an increase in sex-role stereotyping rather than an increase in diversification which a liberal arts education might be expected to produce. This stereotyping is particularly marked among Traditionals. There is greater homogeneity of interests of a stereotyped kind among Traditionals at every choice point than among Innovators. We do not find a "reverse stereotype" of interests among Role-Innovators. What is different about the Role-Innovators as a group, is not the fields they choose, but the levels of accomplishment to which they aspire within those fields. Traditionals, on the other hand, not only have lower levels of aspiration, but as a group are more stereotyped in the fields of endeavor they choose.

Several other differences between Role-Innovators and Traditionals are also of special interest. Role-Innovators change fields less often than do Traditionals, and are therefore probably maximizing their performance. On the other hand, they are somewhat more likely to mention a Second Occupation than are Traditionals, and much more likely to mention a feminine occupation than Traditionals are to mention a masculine occupation. The mention of a more feminine Second Occupation by Role-Innovators suggests a kind of "insurance policy" against the risks of competing in a man's world. This kind of contingency planning may have longer-range effects on women's likelihood of shifting occupations at later stages of the life-cycle.

One of the most difficult arguments to deal with in the controversy over diversification of women's occupational roles is that since women are widely believed to have demonstrated so much weaker commitment to their careers than men, financial support for such Role-Innovators is not justified. Actual labor statistics show that the sex differential in time spent not working among those in the labor force is not very great when level of education or training is controlled. Furthermore, the rate of labor force participation is higher for women with more training than for those with less training. Data from the present study on commitment also suggest that the cause for the sex differential which does exist may not lie entirely with the women. For every measure of Commitment and every Occupational Choice, the more masculine the occupation, the greater is the woman's commitment. The Role-Innovators in

this study express high commitment to their occupations and give great importance to the role of their career in their post-graduate lives. Given the strong personal motivation and commitment found in these women, their possible later failure to carry out these career intentions may be attributable to causes outside themselves.

Family Background

Among the background variables investigated, the most complex and interesting results involve the daughter's relationships with her parents. First of all, an item analysis dealing with closeness to parents, (Part III, Q24), being understood by parent (Q23), or agreeing with parent on values or college goals (Q25) did not provide a clear-cut empirical basis for combining items into a measure of identification with either parent. Therefore, in the absence of any a priori preference among these items as a measure of identification, no conclusion regarding the cross-sectional parental identification hypothesis as a factor in Role-Innovation is possible. If all the items taken together are to be considered necessary components of parent-identification, then the evidence on the hypothesis has to be interpreted as negative.

For the sample as a whole, perceiving oneself as more like father than like mother (Part III, Q22) -- or like neither parent -- is associated with greater Role-Innovation. But having a particularly close or understanding relationships with father is not associated with Role-Innovation. Role-Innovators' relationship to mother is closer than to father but this does not include agreement on substantive issues. Feeling that mother does not understand one, and disagreeing with her on college goals are positively associated with Role-Innovation. The picture is one of substantial cognitive distance from both parents, warm feelings toward mother, but perceived similarity to father. Neither parent seems to be serving as a role-model, and perhaps the only basis for perceived similarity to father is the work-orientation per se.

The existence of some kind of religious dissidence within the home, stemming either from religious dissimilarity between parents or their common dissidence from the prevailing social climate (in the form of atheism or agnosticism) is positively related to Role-Innovation. This suggests that such homes have a "built-in" tolerance for difference or diversity, or perhaps simply greater stimulus to express differences. In either case, the effect on children in such a home is likely to be less stereotypic notions of marriage and family life, and this may generalize to sex-roles. There may simply be a liberating effect from the recognition that social survival does not depend on conformity to all the usual social mores. The same may apply to the existence of political or other areas of dissidence in the home.

Separate analyses were done for women whose mothers were college graduates, and those whose mothers had less education. What differs for the sub-sample of women with better-educated mothers, is that Role-Innovation is associated with perceived similarity to mother rather than father, an improvement in relationship with father, and greater disagreement with mother on college goals as well as less perceived

understanding by her. The first two relationships suggest that better-educated mothers are more likely role models for Innovative daughters, and that the husbands of such mothers are more likely to be seen by such daughters as model role-partners. Such fathers may also be more willing than their wives to follow through the implications of shared family values for daughter's adult decisions. Or, their relationship with daughter may be better than either their wives' or the less-educated fathers' simply because occupationally they are more like what she wants to become. Since they are also likely to be more educated than fathers in general, their support of daughter's Role-Innovation should be more important to her. This interpretation is also consistent with the finding that both mother's and father's education are positively related to daughter's Role-Innovation. The fact that the negative relationships between daughter's Role-Innovation and disagreement on College Goals is weaker for the less-educated mothers than for the more educated mothers may be due to the larger role the latter group of mothers feel they can play in their daughter's choice of occupation. If their values are still traditional ones, this would increase the amount of explicit disagreement they would have with Innovative daughters.

Data on other aspects of family background give additional support to the hypothesis that role-modeling plays a role for some Role-Innovators. Maternal employment, masculinity of mother's occupation and mother's (as well as father's) education are all positively related to Role-Innovation. Role-Innovators from such better-educated homes where mother is probably working in a traditionally feminine profession, have probably taken for granted from an early age favorable parental attitudes toward higher education and career commitment for women. From our review of the literature, we know that such a background produces daughters with less stereotyped conceptions of sex-roles. With this greater freedom to consider alternative life-styles and commitments, the probability of a daughter choosing an Innovative occupation increases. However, for the parents, perhaps particularly for the mother, this may be an "unintended consequence" of their own life-style, and this together with their greater involvement in their daughter's choice may be the source of greater disagreement on substantive issues like the goals of a college education. The fact that disagreement with either parent on values is negatively related to Role-Innovation for the sub-sample with better educated mothers but positively or unrelated for the sample as a whole, further supports this interpretation, since we assume that values about what is important in life are developed earlier, are more durable, and more central, than are the goals one sets for four years in college. To summarize, the Role-Innovative daughter of more educated parents is likely to find her mother an attractive role-model, her father an appropriate model role-partner, and to share many values with both parents. The interpretation and application of these models and values, however, being Innovative, lead to conflict with a mother who is not herself Innovative. Conflicts of this kind should be less with an Innovative mother.

A different picture emerges of Role-Innovators from less educated homes where we assume a different set of values and a different maternal model exist. From the differences in results between the total sample

and the subsample enumerated above and supported by a separate analysis of the women with less-educated mothers, we can say that the Role-Innovative daughter in such homes faces greater psychological distance or autonomy on most dimensions and from both parents but not necessarily greater conflict. Her motivation may include mobility aspirations as well as achievement drives, and therefore evince less ambivalence toward-- or a more male-like pattern of -- various achievement concerns.

Although the results on effect of background factors on Role-Innovation are not surprising taken individually, it seems that to the parents of Role-Innovators, the outcome is inadvertent. To the daughter with the appropriate abilities, however, Role-Innovation may seem the only logical choice. This posture on the parent's part may be one of the sources of the ambivalence toward certain kinds of achievement which is revealed in the personality data.

Personality

The voluminous literature on need achievement, using the nAch projective measure of achievement motivation, has produced very conflicting results on women. This seems to reflect a number of issues: that typical feminine role expectations create special ambivalences about achievement for women; that achievement in women is partly expressed through the husband; that, as Smith (1968) has argued, the motive being assessed by nAch may have more to do with competitive striving in a context of social comparison, i.e., with extrinsically-based motivation, than with intrinsic effort toward excellence.

To tap this intrinsic motivation, and to take account of the relevance of the husband to a woman's achievement, three new measures of achievement motivation were developed for this study. Two of these were labelled "Demand Character of the Future Husband" (or "Husband's Demand") and "Demand Character of the Wife's Future" (or "Wife's Demand"). The Demand dimension is defined as the amount of demand an individual appears to make on herself for long-continuing effort, challenge, and risk-taking. Such demands might result from goals which are to be obtained only with difficulty; from a desired style of life which pushes the limits of the individual's capacity, or they may result from deeply-felt values which impose a need for difficult action.

Whereas nAch is defined in terms of concern with a publicly-defined standard of excellence, the Demand measure is defined in terms of a personal standard of maximum capability. For this reason, the latter seems to be a better approach to conceptualizing and ultimately to measuring, intrinsic achievement motivation.

Both of these Demand measures were coded from the responses to the open-ended question which asked students to describe the kind of person they wanted to marry (Question 89). Descriptions such as "a brilliant individual -- not afraid to take risks -- deep commitment to moral beliefs" are examples of high scores on Husband's Demand; "good sense of humor, relaxed" are examples of low scores. Wife's Demand was also scored from the woman's description of her ideal husband. Using the

same definition of the Demand dimension, coders² were instructed to rate each husband-description in terms of the demands which would be imposed upon the writer by virtue of living with the man she describes. That is, would life with such a man demand from her effortful responses to major challenges, or would it involve little challenge, centering primarily around concern with security?

The third measure of achievement motivation developed for this study was called "Future Work Excellence." It is based on the coding of the responses to a question asking students to picture how they would like life to work out for them (Question 56); responses were coded for whether they included some mention of a concern with standards of excellence in connection with the woman's own occupation.

In addition to these three measures developed specifically for this study, we also adapted Horner's (1968) measure of Motive to Avoid Success, which is specifically relevant to the issue of women's ambivalence about achievement. According to Horner, an approach-avoidance conflict is aroused in high achievement-motivated women, because the desire to do well, if satisfied, places a woman in a position (of eminence, high rewards, superordinacy with respect to men) which is culturally proscribed.

Turning to the results, several of the achievement motivation measures developed for this study proved to be more effective in predicting Role-Innovation than *nAch*. Demand Character of the Future Husband, Demand Character of the Wife's Future and Future Work Excellence were significantly related to Role-Innovation in one or more analyses. Wife's Demand and Future Work Excellence, both considered here as measures of intrinsic motivation, are positively related to Role-Innovation. Husband's Demand, *nAch*, and Motive to Avoid Success are negatively related to Role-Innovation, but only Husband's Demand is significantly so (when other variables are controlled).

The findings on motivation patterns make a significant contribution toward the two issues raised regarding achievement motivation in women. First, we have found a new way of measuring intrinsic achievement motivation in women which predicts to vocational aspirations. Second, we have found common and differentiating patterns of achievement concerns which distinguish most women's concerns from that of Traditional women.

For Role-Innovators and Traditionals two independent and antagonistic clusters of achievement related variables consist of the two Demand variables and Future Work Excellence taken as indices of intrinsic motivation on the one hand, and Importance of Advancement and Salary (Question 79) taken as indices of extrinsic motivation on the other hand. For Role-Innovators only, *nAch* appears to be part of the extrinsic motivation cluster. Thus, for both groups of women (and the sample as a whole) intrinsic achievement motivation is incompatible with extrinsic achievement motivation. It seems few women can be motivated by both, and most

² Different coders than the ones who coded the same protocols for Husband's Demand.

of the women who pursue Innovative careers are intrinsically rather than extrinsically motivated.

However, on three out of five measures of extrinsic achievement motivation, Role-Innovators score somewhat higher than Traditionals, indicating that some proportion of Role-Innovators have what is generally found to be a "masculine" pattern of achievement concerns. To the extent that some Role-Innovators are motivated by social or extrinsic rewards, they may consist largely of women from less-educated homes who are striving for upward mobility "on their own hook" rather than through their husbands to-be. It is probably these women to whom the more masculine pattern of combined intrinsic and extrinsic concerns, or predominantly extrinsic concerns, apply. These Role-Innovators would have less of the Fear Success ambivalence evinced by their more exclusively intrinsically motivated sisters.

Among Role-Innovators, Motive to Avoid Success is significantly negatively correlated with Importance of Leadership (Question 108), suggesting that prominence, particularly among males, rather than achievement in the sense of classical need achievement theory, is a source of anxiety among Role-Innovators. Thus, of all the social rewards for excellence, prominence appears to be the most unwanted probably because it is seen as incompatible with femininity and/or with female sex role requirements, as revealed by the themes in the Fear Success TATs.

Several results support the hypothesis that Traditionals tend more than Role-Innovators to displace their achievement concerns onto future husband, whereas Role-Innovators are more likely to generalize from their own generally high level of Demand to expectations for future husband. The correlation between Wife's and Husband's Demand is significantly lower among Traditionals than among Role-Innovators, and the Traditionals have a significantly lower mean score than the Role-Innovators on Wife's Demand, though there is no difference between the two groups in mean Husband's Demand. Also, Motive to Avoid Success is greater among Traditionals and more likely to be associated with low scores on Husband's Demand, further supporting the displacement hypothesis by showing its probable source in anxiety about success.

There are probably several types of Traditionals, too. The majority must be women whose achievement motivation has always been low, or has been so thoroughly sublimated into socially acceptable avenues (i.e., onto future husband), that they do not score very high on Wife's Demand. I believe the latter process is the more likely in this particular population. For these latter women, scoring on Husband's Demand is "true" displacement. The first type of woman would not score as high on Husband's Demand and this is what reduces the correlation between these two measures among the Traditionals. The Traditionals who are seeking only upward mobility through conventional means (i.e., via future husband) and not sublimating their own achievement drive would score low on both Demand measures. Following Horner's (1968) theory

that the women who are not high in achievement motivation would also not be anxious about success, and therefore, freer to express achievement themes on the TAT, we may postulate that the women scoring low on both Demand measures would also be lower on Fear Success, and therefore have less depressed nAch scores. This group of Traditionals would then be the ones contributing to the weak negative relationship between nAch and Role-Innovation.

Taking the remaining personality findings together the following portrait of the Role-Innovator emerges. The Role-Innovator's reasons for choosing a vocation and continuing in it are individualistic and because it gives her personal satisfaction. Some of the most extremely innovative women are also achievement-oriented in the social comparison sense. In contrast to the Traditional woman who expects to live through and for others, the Role-Innovator expects to make a life for herself, through her own efforts. The emphasis on autonomy is further strengthened by her tolerance for delayed marital gratification (Question 98) and later closure on choice of occupation, and her self-description on the self-concept bi-polar adjectives (Question 105) as relying more on her own (rather than others') opinions, being more unconventional, and having others depend on her (rather than her depending on others). She tends to have somewhat more untraditional attitudes on sex roles, but hardly a recognizable feminist ideology. She is less concerned than the Traditional about her husband being a good family man and more concerned that he allow her to pursue her own career. She describes herself on the self-concept question as less extremely Feminine than does the Traditional, and is somewhat more likely to mention Masculine qualities among the traits she would desire in a husband. The last finding may reflect a need for an adequately masculine role-partner to reassure her sense of femininity which is challenged in her vocational or non-domestic social setting.

What one may consider the psychological costs of this freer posture are expressed in feeling greater conflict between marriage and having a career (Question 104), describing oneself as "not too successful" on the self-concept question, feeling that one is "always acting-not being myself," (Q.111o) and worrying about identity questions ("Who Am I?", Question 112).

College Experience

The characterization of the Role-Innovator as an autonomous individual does not preclude the necessity for her to have some source of social support in order to continue pursuit of her chosen vocation. This might be most essential to the Role-Innovators who had taken familial values for granted until discovering that their own implementation of those values leads to conflict with parents. The most likely source for such support should be faculty in her chosen field, assuming their response to students is based on universalistic criteria and their concern with subject-matter is greater than their concern with sex-role traditions. Furthermore, without the encouragement of some faculty member, it would be very difficult for a woman to stay in a highly male-dominated field,

because of the critical role such advisors play in obtaining access to the resources of an academic department, and, when appropriate, being admitted to graduate studies.

On the other hand, the major source of anxiety regarding achievement as revealed in the Fear Success themes is rejection by male peers. The reassurance of a male role-partner may be particularly critical at this stage of the life-cycle when most women are committing themselves to long-term marital security.

The most interesting results to come from the college experience data concern the role of male peers. The experience of these Role-Innovators does not justify the extreme fears of ostracization expressed in the TAT stories for Motive to Avoid Success. Instead of social rejection and lack of attractiveness to the opposite sex, we find first of all, that there is no significant difference between Role-Innovators and Traditionals in the number of romantic relationships they include among their ten closest friends. Furthermore, the number of non-romantic males included among their ten closest friends is significantly larger than that reported by Traditionals. Since Role-Innovators would tend to have more male classmates, these are probably contributing to this difference.

If we may consider this a real discrepancy between male peers' actual attitudes and women's expectations of these attitudes, the finding parallels McKee and Sherriff's (1959) that in talking about what boys want in an ideal girl, high school girls impute even more stereotyped attitudes to boys than the boys themselves have. Although such discrepancies may be the result of real "pluralistic ignorance," they may also reflect the difference in risk to each sex represented by the different views. By behaving (and believing) in terms of more traditional standards, a girl maximizes the number of men who would consider her marriageable (since more men would reject a prospective wife for being too avant-garde than for being too traditional), and therefore minimizes her risk of being mate-less. A boy, on the other hand, by expressing in words and behavior more tolerance for feminine "nontraditionality" increases the number of girls he has access to and runs no additional risk of remaining mate-less.

The importance of the male friend's attitude as a factor contributing to Role-Innovation is indicated by several findings. The small number of women whose men friends said they would disapprove of their wife having a career averaged markedly lower scores on Role-Innovation than the women whose men friends said they would either approve or not mind it.³ The women whose men friends gave as reasons for her having a career the attractions or benefits it would have for herself, were more Role-Innovative than the women whose men friends gave reasons in terms of obligations (e.g., to use her education) or

³ These results are based on the questionnaire and interview responses of the men friends who were part of the sample of the broader study, not on our women's perceptions of their men friend's attitudes.

avoidance of negative consequences if she didn't work (e.g., boredom). Treating these reasons as "liberal" and "traditional," respectively, male friends' liberal attitudes towards women's careers is positively related to respondent's Role-Innovation. Finally, having more steady, serious relationships with a Teaching Fellow or Laboratory Assistant in one's own field (as suggested by greater frequency of contact, with fewer such persons) is positively related to Role-Innovation. This result is similar to Wallace's finding (1964, see p. 44) that Freshman girls who want graduate training probably adopt "non-freshman boys as a reference group for their own adult career aspirations" (p. 315) because they can be perceived as prestigious, freer from cultural constraints, and more likely to be thinking about graduate school themselves. All of these considerations which make the non-Freshman boy a source of innovative role support, apply even better to the graduate student who is a teaching assistant. With a more adequate study designed specifically to investigate the "boyfriend hypothesis" it seems likely that the supportive male peer would prove to be the most "liberating" factor in the college woman's experience.

Other faculty and female friends were found to have a mildly positive influence on Role-Innovation; Mother and other relatives a definitely negative or conservative influence; and Father a positive influence only when other factors are controlled. There is also evidence of indirect support from female peers in the form of value-congruence regarding importance given to career and untraditional attitudes towards sex-role, but these feelings are not in themselves strong enough to support the hypothesis that selected female peers provide a supportive sub-culture for the Role-Innovator.

So far we have been treating each result as independent evidence regarding the characteristics of the Role-Innovator. The portrait which emerges when these results are considered simultaneously can be considered a characterization of "the most likely" Role-Innovator in this sample. But some of the results suggest a variation which might be associated with the class origin of the Role-Innovator. Among these results are the negative relationship between intrinsic and extrinsic motivation on the one hand, and the finding that Role-Innovators tend to be higher in both of these kinds of motivation than are Traditionals; and the somewhat different results regarding relationship with parents when mother's education is controlled. The following section describes four plausible socialization sequences in which certain background characteristics are seen to be critical.

A Socialization Typology

Three assumptions were made in putting the various factors shown to be associated with Role-Innovation into a plausible developmental sequence: (1) a similar distribution of talents exists in each section of the sample divided by parents' education and mother's work history; (2) achievement motivation is more likely to develop in women from better-educated homes and mobility aspirations are more likely to develop in women from less-educated homes; and (3) that the college-educated women in this study are more likely to take their mother as a role-model if she too has at least a B.A. degree than if she does not.

The daughter of the better-educated working mother and father grows up in a family where: (a) mother's higher education and career commitment are valued by both parents; (b) these values and the mother's working are likely to decrease sex-typing in the division of labor between the parents in the home; and (c) she (the daughter) receives the greater independence training or opportunity which are associated with maternal employment. Such daughters should be high in achievement motivation, low in sex role stereotypy, take the mother as an appropriate model, i.e., as a working wife and mother, and share the parent's values about what is important in life. Given a random distribution of talents in such daughters, a greater number of them will develop "masculine" interests than would be the case in a home where fewer such permissive or facilitating factors exist. These conditions, then, are likely to produce both high levels of achievement motivation and "masculine" interests. However, given that most of these mothers are themselves in traditionally feminine occupations, their attitude toward a very innovative occupational choice on the part of their daughter, with its attendant implications of delayed marriage and diminished orientation toward domestic gratifications, is likely to be negative. Such mothers may perceive such a choice as a rejection of their own style of life--even though it grows out of that style--or as too risky to the achievement of more valued traditional roles. Since such mothers are also likely to be high in achievement motivation themselves, they may treat the Role-Innovative daughter as a competitor in the vocational sphere. Because of her own educational and vocational accomplishments the mother feels free to advise her daughter in these matters and thus provides the occasion for explicit airing of disagreements. This conflict with mother over the daughter's application of values which have been shared may have become open only recently (during college), but the attitudes and assumptions which limit the mother's ability to support a Role-Innovative daughter's decision must have been presented to the daughter in less direct forms earlier. This history and present conflict with mother may be a source of the ambivalence toward achievement on the daughter's part which is expressed in Fear Success stories whose theme is alienation from other females.

The relationship with father need not be complicated thus. Neither his personal style of life nor his "competitive edge" are challenged by a Role-Innovative daughter. His role vis-a-vis daughter's decision-making may then depend on what he thinks marital loyalty requires of him in the mother-daughter conflict. Not only the father's role, but that of other males as well, may be critical at this stage. Relationships with the opposite sex are a critical part of the women's self-esteem at this point; for many women a single such relationship takes on overwhelming implications for her future, and for almost all women this time in their lives (at college) is seen as their best opportunity to establish such a relationship. The greater the would-be innovator's ambivalence over achievement, the more critical a role her father, male professors, and boyfriend(s) may play. Since she can exercise active preference only in choice of boyfriend, the values and attitudes of this person are both a gauge of her own set of priorities and an important source of reinforcement for those. But even if adequate role-support is forthcoming from each or all of these male sources, complete dedication to a

Role-Innovative way of life may not be possible unless one is fully emancipated from the influence of the mother. Otherwise, the ambivalence generated by conflict with her (and with the prevailing social traditions which she represents) will manifest itself in the daughter's willingness to relinquish those social rewards for high levels of accomplishment which we have called extrinsic motivators.

Several elements in this sequence are quite different for the daughter of the better-educated but non-working mother. The status of the parents in this family is again likely to produce fairly high achievement motivation and to make the mother an acceptable role-model for the daughter, but in this case she is a non-working model. This means that the values of both parents are more traditional and the division of labor within the home is more sex-typed. The daughter presumably shares these more traditional values and acquires more stereotypic notions about sex roles in general. Conflict with either parent is minimal, but the achievement concerns which cannot be translated into personal aspirations under this value system, are then displaced onto the only acceptable target for this purpose, one's future husband. It is also likely to be focused on the woman's children later, particularly sons. This displacement mechanism is fed by the conflict between a personal drive for achievement and a value system which penalizes the personal satisfaction of such a drive. The intensity of this conflict is assessed by the Fear Success measure. The Motive to Avoid Success derives its strength from the combined sanctioning power of a respected mother role-model and prevailing social norms. When these operate in the same direction, and there is no ambivalence on the part of the mother towards her own role, the outcome seems over-determined. Some of the daughter's achievement concerns may take the form of greater commitment to a traditional occupation than would be the case for other Traditionals not motivated by achievement concerns. Peers and boyfriend(s) would again be selected such that the value system, a traditional one in this case, is reinforced.

The case of the Role-Innovator from a less-educated home in which the mother works presents several points of contrast with the first type of Role-Innovator. Some of the consequences of mother's working are the same: less role stereotypy insofar as acceptability of women working, but perhaps not as much with respect to division of labor in the home, and greater autonomy in the daughter which contributes to the development of achievement motivation. However, the kind of work the mother does is likely to be less prestigious and done more for financial reasons than for personal satisfaction of any motives. In this situation, the mother is a less attractive role-model, and her status will engender mobility aspirations in the daughter in addition to achievement motivation. This combination of concerns resembles the masculine pattern more than does that of the first type of Role-Innovator. The relative lack of ambivalence toward achievement here may be attributed to the greater degree of autonomy from both parents, but particularly from mother. Religious or other forms of dissidence within the home may contribute to greater resistance to (traditional) normative pressures from outside the home. Since the father is likely to be better educated than his wife but

probably not as educated as the fathers with educated wives, their ability or willingness to provide role-support to Innovative daughters may be limited to her desire to have a career, but not necessarily to her choice of an Innovative career, a situation parallel to that of the better-educated mother vis-a-vis her Role Innovative daughter. The Innovative daughter who finds her mother's position unenviable because it seems to involve not the best but the least desirable of both worlds -- a low-status, less remunerative occupation without much reduction in domestic burdens -- may be less intimidated by the prospect of delayed marriage than her more conventionally socialized counterpart. Her mother may also convey substantial ambivalence about the dual role, which we would not expect of the more educated working mother. Therefore, she may be able to persevere in her aspirations more easily in the absence of an appropriate male to provide her role support.

The daughter of less educated parents whose mother does not work grows up in a rather conventional mold, both with respect to values and autonomy. There is likely to be some desire for upward mobility through conventional channels, i.e., through husband, and the early choice of a Traditional occupation is consistent with such aspirations.

In conclusion, several widely accepted notions about the kinds of women who aspire to male-dominated professions may be laid to rest. They do not show evidence of having identified with their fathers in preference over their mothers. In fact, more educated working mothers, particularly those who are themselves in more male-dominated occupations, are taken as role-models by such daughters. A four-part typology of the women in the sample is suggested in which role-modeling and the type of maternal model available are related to the occupational choice of the women. A sample designed to include adequate numbers of different maternal models would make it possible to test this typology. Role-Innovative women do not reject the core female roles of wife and mother, though they expect to postpone marriage and have fewer children than more traditional women; nor do they think of themselves as "masculine" women. There is no evidence that they make such occupational plans because of difficulty in attracting the opposite sex, since they have as many romantic as well as casual relationships with men as do more traditional college women. Their commitment to their careers is greater than that of women going into feminine professions even while they are in college, so that the decision to continue working cannot be viewed as merely being made by default when other alternatives fail.

The characteristics discovered to differentiate Role-Innovators and Traditionals most strongly are personality-motivational factors. As compared to the women going into feminine professions, they are more autonomous, individualistic, and motivated by internally imposed demands to perform to capacity. They also express more doubts about their ability to succeed and about identity, which reflect the fact that the roles they have chosen are more difficult in standards of performance and more ambiguous in social meaning. Although faculty in their major field and female college friends provide some role-support, a tolerant or supportive boyfriend seems more important at this stage of the life-cycle, particularly perhaps for women more thoroughly socialized into middle-class mores.